MEDICAL RECORD

BOSTON
SEP 6 1945
MEDICAL LIBRARY

NEITHER hunger nor satiety, nor anything that exceeds the natural bounds, can be good or healthful.

—Hippocrates

August 1945

Vol. 158, No. 8

A single 100 mg. ampoule of ACÉCOLINE may often suffice to meet an emergency in acute peripheral arterial spasm, especially when associated with hypertension

ACÉCOLINE employs the identical substance, acetylcholine, which the body expends to mediate nerve impulses, interruption of which precipitates arterial crisis.

ACÉCOLINE is correspondingly effective in allied conditions, such as Raynaud's disease, endarteritis obliterans, intermittent claudication, diabetic and senile gangrene, varicose ulcers and certain tachycardias.

ACÉCOLINE is always ready for emergency use without diluents. It is sterile, indefinitely stable and non-toxic.

Professional literature on request.

Dosage

100 to 200 mg. twice daily, up to 15 injections per course. Intramuscular or subcutaneous, never intravenous. Available in 20, 50, 100 and 200 mg. strengths of acetylcholine hydrochloride per 1 cc. ampoule. Boxes of six. All ampoules contain 40 mg. of anesthetic salicyl alcohol (saligenin) and propylene glycol q.s. Contraindicated in asthma, bradycardia and coronary disease.

ACÉCOLINE

IN ARTERIAL CRISIS

ANGLO-FRENCH LABORATORIES, Inc.

75 VARICK STREET • NEW YORK 13, N. Y.

In Allergic Rhinitis—

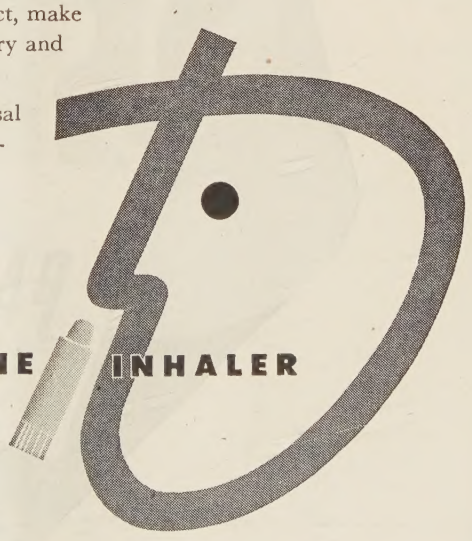
"The inhalation from tubes of volatilizable vasoconstricting drugs is often very effective. The most popular and best known of this sort is the benzedrine (amphetamine) inhaler."

Feinberg, S.M.; Allergy in Practice, The Year Book Publishers, Inc., Chicago, 1944, "Hay Fever Treatment."

A BETTER MEANS OF NASAL MEDICATION

Between office treatments, the use of BENZEDRINE INHALER, N.N.R., will afford the allergic rhinitis patient marked symptomatic relief. It may, in fact, make all the difference between weeks of acute misery and weeks of comparative comfort.

The Inhaler produces a shrinkage of the nasal mucosa equal to, or greater than, that produced by ephedrine—and approximately 17% more lasting. It is, consequently, strikingly effective in reducing the congestion of hay fever, head colds, and sinusitis.
Smith, Kline & French Laboratories.
Philadelphia, Pa.



BENZEDRINE INHALER

Each Benzedrine Inhaler is packed with racemic amphetamine, S.K.F., 200 mg.; menthol, 10 mg.; and aromatics.

Whole opium in a single ampul

Pantopon 'Roche' contains not merely morphine—but *ALL* the other alkaloids of opium. This combination affords a better balanced, smoother opiate action with less likelihood of unpleasant by-effects . . .

HOFFMANN-LA ROCHE, INC.
Nutley 10, New Jersey.

MEDICAL RECORD

FORMERLY KNOWN AS THE MEDICAL JOURNAL AND RECORD

PUBLISHED MONTHLY BY

THE MEDICAL JOURNAL AND RECORD PUBLISHING CO., INC.

AUGUST 1945

OPEN FORUM 454

EDITORIALS 487

PAPERS AND ADDRESSES

Arthritis as Seen by an Orthopedist
Otto C. Kestler, M.D., New York, N.Y. 473

Tragedies of the Uterine Incision Incident to Caesarean Section
J. W. Kennedy, M.D., Philadelphia, Pa. 475

Dietetics in Diseases of the Stomach *(Concluded)*
Max Einhorn, M.D., New York, N.Y. 476

A Cure for Dandruff and Falling Hair
John C. Rommell, M.D., Philadelphia, Pa. 478

SYMPOSIUM ON INTERNAL MEDICINE

Diagnosis and Treatment of Gout
E. Neuwirth, M.D., New York, N.Y. 479

Cardiac Aneurysm: Report of a Clinical Case
J. L. Diamond, M.D., Fargo, North Dakota 482

Asymptomatic Amebiasis Encountered in New York City
Anthony Bassler, M.D., New York, N.Y. 485

SPECIAL ARTICLE:

Good Health in War and Peace
T. Swann Harding, Falls Church, Va. 454

NEWS ITEMS 488

BOOK REVIEWS 491

MEDICOLEGAL NOTES 494

MISCELLANY 496

VOL. 158, No. 8
WHOLE No. 2751

Entered as Second Class matter at the Post Office at Rutherford, N. J., under the Act of March 3, 1879. Office of Publication, 210 Orchard Street, East Rutherford, N. J. Editorial and Executive Offices, 215 Fourth Avenue, New York 3, N. Y.

SINGLE COPIES.....FORTY CENTS
DOMESTIC YEARLY SUBSCRIPTIONS $4.00
FOREIGN YEARLY SUBSCRIPTIONS. $4.75

Copyright, 1945, by The Medical Journal and Record Publishing Company, Inc.

Pioneering

In being the first to introduce
ESTINYL (ethinyl estradiol),
the most efficient of all oral
estrogens, natural or synthetic,
Schering has again pioneered
a new advance in endocrine therapy.

ESTINYL

FIRST in potency, being from 10 to 30 times more potent than stilbene derivatives.

FIRST in economy, being more efficient upon oral administration than other estrogens derived from natural sources.

FIRST in being an orally *potent* derivative of estradiol, the primary hormone of the ovarian follicle.

ESTINYL, ethinyl estradiol, is available in tablets of 0.05 mg. and 0.02 mg. strengths. Both in bottles of 100, 250 and 1,000 tablets.

TRADE-MARK ESTINYL—REG. U. S. PAT. OFF.
COPYRIGHT 1945 BY SCHERING CORPORATION

SCHERING

Schering CORPORATION • BLOOMFIELD, NEW JERSEY

Medical Books for Italy

The Medical and Surgical Relief Committee of America has received an appeal for medical books from Dr. Sevringhaus, a member of the Medical Nutrition Mission in Italy. The Mission has set up in a hospital called the Polyclinica which is part of the University of Naples. The books are for the use of the Mission. Later it is intended to donate them to the Pediatric Clinic library. The list of books requested is as follows:

1. Strong: Stitt's *Diagnosis, Prevention, and Treatment of Tropical Diseases,* Seventh edition, two volumes, Blakiston.
2. Conant, Martin, et al.: *Manual of Clinical Mycology,* Saunders.
3. Saxl: *Pediatric Dietetics,* Lea and Febiger, 1937.
4. Brennerman's *Loose Leaf Pediatrics,* four volumes, Nelson.
5. Best and Taylor: *Physiological Basis of Medical Practice,* Williams and Wilkins.
6. McLester: *Clinical Nutrition and Dietotherapy,* Saunders.
7. Miller: *Oral Diagnosis,* Blakiston.
8. Peters and Van Slyke: *Quantitative Clinical Chemistry,* two volumes, Williams and Wilkins.

As a result of the war and German occupation, the European scientific world is at a tremendous disadvantage, not only because such an appallingly large amount of equipment has been destroyed or stolen. but also because it has been impossible for professional men to continue their normal pursuits of research, teaching, writing or studying. Progress in any direction has been impossible. Therefore, whatever Americans can do to help scientific knowledge in France, Italy and other countries to reach and keep abreast of the level attained in the United States, will be of inestimable value. It is for these reasons that an appeal is being made to American physicians.

Health of Army Women Overseas

Major Margaret Craighill, MC, consultant to The Surgeon General for Women's Health and Welfare, has returned to Washington, D.C., from an eight-month inspection trip of WAC and medical installations during which she covered approximately fifty-six thousand miles of the war zones, visiting England, France, Italy, Egypt, Africa, the Persian Gulf, India, Burma, China, Ceylon, Australia, New Guinea, the Philippine Islands, Guam and Hawaii. The tour was made for the purpose of determining the health of Army women overseas.

Major Craighill stated that in general the health of Army women overseas was excellent—even better than that of the men in many places because they had been given a better break in living conditions. She found that illness were more prevalent among the older women and that the younger women were better able to adapt themselves to hardships and inconveniences. For this reason she expressed her personal opinion that women over thirty-five should not be sent overseas unless they were needed for top administrative posts. There was no need to be concerned about the effect of either cold or tropical climates on American women, she said, although she believed that they should not be left in difficult climates overseas for more than two years.

Effective, Convenient and Economical

THE effectiveness of Mercurochrome has been demonstrated by more than twenty years of extensive clinical use. For professional convenience Mercurochrome is supplied in four forms— Aqueous Solution in Applicator Bottles for the treatment of minor wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

Mercurochrome

(H. W. & D. brand of merbromin, dibromoxymercurifluorescein-sodium)

is economical because stock solutions may be dispensed quickly and at low cost. Stock solutions keep indefinitely. Mercurochrome is antiseptic and relatively non-irritating and non-toxic in wounds.

Complete literature will be furnished on request.

HYNSON, WESTCOTT & DUNNING, INC.

Baltimore, Maryland

Pruritus

due to Insect Bites
Ivy Poisoning · Sunburn
Localized Vesicular Areas

CALAMATUM (NASON'S) is a *Non-Greasy*, Fully Effective Anti-Pruritic *Cream* embodying Calamine with Zinc Oxide and Campho-Phenol in an adherent base.

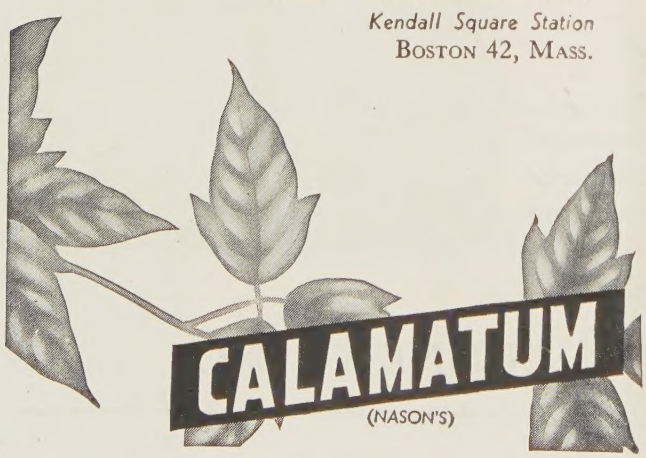
FOR the immediate and lasting relief of itching and general discomfort of many skin affections which are prevalent during the warm weather months, more and more physicians are successfully prescribing CALAMATUM (Nason's). Because it is a *cream*, dries immediately and will not rub off, and requires no bandaging, the patient is encouraged to renew applications as often as directed by the doctor, and experiences no embarrassment when doing so in public places.

CALAMATUM (Nason's) has additional *therapeutic* advantages. It dries at once, adhering to the lesion, and exercises its full anti-pruritic action without loss by running or rubbing off, at the same time localizing the infection by preventing the spread of any exudate. The camphor and phenol content alleviates itching with the consequent desire for relief by scratching and thus helps to reduce the danger of secondary infection.

If you wish to try CALAMATUM for yourself, your name and address will bring a sample tube with our compliments.

CALAMATUM (Nason's) is packaged in 2-oz. tubes obtainable from prescription druggists or direct.

TAILBY-NASON COMPANY
Kendall Square Station
BOSTON 42, MASS.



Open Forum

GOOD HEALTH IN WAR AND PEACE

T. SWANN HARDING
Falls Church, Va.

It has taken war to make us health-conscious. At peace health is so secondary a matter that its maintenance depends largely on individual income. Facilities exist to provide medical and dental care but, unless a person makes enough money to afford their full use, he can go without, if he does not object to charity.

In 1942, for instance, we had in this country about 33.4 million families or an aggregate of 41.2 million spending units. Of these seventy percent or more were in categories with annual incomes of $3,000 or less. While the average family spent $100 on medical care a year, those with incomes below $3,000 spent considerably less, meaning they could not afford the medical care they required.

Even though low-income families spent a much greater proportion of their incomes on medical care than did high-income families, they could not afford what they required. Sickness and poverty go together. Wage earners in families with incomes of $1,000 or under a year have twice as many days of disabling illness as those in families with incomes over $3,000.

High-quality medical care on a charity or a low-cost basis has normally been available in very few localities. Even in these, low-income families have proved reluctant to accept the odium of receiving free treatment.

When it becomes necessary, however, to kill other human beings in warfare as efficiently as possible we need healthy young men for the job. For, even when they are equipped with the most modern conveniences and aids to mass slaughter, their work is carried on under arduous circumstances and ill-health is a barrier to success. The fact that four and a half million of our young men turned out to be unfit for active military service because of defects was astounding.

For years our medical associations have dinned into us that we had the highest medical standards of any nation, that these could not possibly be improved, and that the excellent health of all our people must be attributed to the modern horse-and-buggy medical set-up. Naturally we did not believe all of this but, until mass destruction of human life and property became paramount in our eyes, we did not stop to consider how untrue it really was.

Some eight or nine million men in the prime of life were unfit for general military duty—the 4Fs. Not all of them, of course, were examined for induction. That is more than twice the number of men we now have overseas engaged in global war. In the selective process the four and a half million men mentioned above remained unfit for military service after all doubtful cases had been reexamined on a basis of lowered standards.

The four and a half million remain 4F after reclassification of all who could be rendered eligible by self-rehabilitation and after induction of those acceptable for rehabilitation. These men were rejected under the lowest possible standards defined by a special commission of physicians appointed by the President.

DYSMENORRHEA

"A more rational approach seems to be indicated in treating dysmenorrhea by attempting to raise the pain threshold, or in some other way, block the sensory pathways to the higher centers of the brain."*

*Kroger, W. S., and Freed, S. C.: Am. J. Obst. & Gynec, 46:817 (December), 1943.

'TABLOID

'Empirin' COMPOUND

In bottles of 100 and 500 • *Each product contains—Acetophenetidin gr. 2½ • Caffeine gr. ½ • Acetylsalicylic acid gr. 3½ • Also 'Tabloid' 'Empirin' Compound with Codeine Phosphate • 'Tabloid' 'Empirin', Reg. Trademarks*

BURROUGHS WELLCOME & CO. (U. S. A.) 9 & 11 EAST 41ST STREET, NEW YORK, 17

**STOP THE URGE TO SCRATCH...
ELIMINATE THE ITCHING...
WITH ENZO-CAL**

Prompt control of itching, which means less danger of infection from scratching, — the "aid-to-healing" and protective action of semi-colloidal calamine and zinc oxide — the mild anesthetic action of benzocaine — these all combine to make Enzo-Cal the professional favorite among antipruritics.

It's the favorite with patients, too, because it's a pleasing, greaseless vanishing cream — so clean and convenient to use.

In pruritus ani, pruritus vulvae, intertrigo, eczema, diaper-rash, poison-ivy dermatitis, and skin excoriations specify Enzo-Cal.

★

Sample and literature to physicians on request to Crookes Laboratories, Inc., 305 East 45th Street, New York 17, N. Y.

In 2 oz. tubes and 1 lb. jars at leading pharmacies.

Enzo-CAL

CROOKES

PRESCRIPTION PRODUCTS

The magnitude of the Army's dental program alone shows how negligent we had been regarding sound physical health. During 1942 and 1943 more than fourteen and a half million cases were treated, thirty-one million fillings were provided, six million teeth were replaced and one and a half million bridges and dentures had to be supplied. The work required more than fifty-three million sittings by patients and the production of three and a half times the normal quantity of dental supplies and equipment we had ever produced in any one year.

The need therefore was great. The evidence that our horse-and-buggy medical organization did not meet the need was overwhelming. Indeed a Public Health Survey in 1935 disclosed that twenty-three million Americans had a chronic disease or physical impairment. Much other evidence of our feeble health at peace was collected by the Farm Security Administration, the Life Extension Institute, the National Youth Administration, and other organizations.

When we got into the war it was conservatively estimated that war workers lost six hundred million man-hours annually due to illness. That is about forty-seven times the amount of time lost through strikes and lock-outs of all kinds during 1943. That such illness and disability, much of it preventable with sound, readily available medical care, cut deeply into war production is self-evident.

It is true that, as the medical associations tell us, the health of Americans has improved greatly between 1900 and the present. But the major credit for this goes not to specialists and general practitioners working in therapeutic medicine on fee. It goes to improved preventive services and facilities.

Federal, State, and local public health services have improved vastly. This enormously cut the death rates from such diseases as typhoid, paratyphoid, diarrhea, enteritis, and diphtheria. Better water supplies, improved sewerage and rural sanitation take their large share of the credit also. Medical research has made rapid progress.

Medicine has lagged in the main in the matter of perfecting a scientific organization to make the best in medical care available to all at economical rates. Indeed the same number of doctors, nurses, and hospitals we had could, if better distributed, have given good medical care to all our people all of the time at no greater expenditure of funds than we made for half or part-time service. Scientific organization and distribution were alone required.

The cost would not be shocking at all. In 1933 adequate medical and dental care, with proper remuneration for those who supplied the service, could be provided for an average of $125 per family per year. Even today $150 per family would turn the trick. However, at least half the families with incomes under $2,000 could not pay even this much while it would impose hardship on many at the $2,000 to $3,000 income level.

A major difficulty about which our medical associations have done little or nothing is the faulty distribution of physicians and medical facilities. Therefore, persons afflicted with cancer, tuberculosis, and many other serious diseases constantly go too long without medical attention, because it is often difficult of access, and they suffer the disastrous consequences.

Whereas the national ratio of general hospital beds

clearly defined

THE MALE CLIMACTERIC SYNDROME

is now recognized as a clearly defined entity, and may be suspected to be present when middle-aged men in the prime of life complain of tiredness, nervousness, insomnia, vague pains and impotence.

ORETON

Therapy with *Oreton*, testosterone propionate, frequently alleviates these manifestations, if they are due to insufficient hormone, and restores male climacteric patients to former physical and mental vigor.

TRADE-MARK ORETON—REG. U. S. PAT. OFF.

SCHERING

Schering CORPORATION • BLOOMFIELD, NEW JERSEY

was 3.4 per 1,000 of population, the ratio in certain Southern states was but half that. Some forty percent of our counties with a total population of fifteen million had no registered hospitals when we entered the war. True, as the American Medical Association piously insisted, few resided more than thirty miles from some hospital—but was it a good hospital? Did it have vacant beds? Could they afford its services? Did racial or legal barriers or residence requirements stand in the way?

Again, our strictly rural communities usually have only about a third as many physicians as do urban communities. Counties of five thousand population sometimes altogether lack a physician. Massachusetts normally has about three times as many active physicians in proportion to population as does South Carolina. In 1938, counties with a per capita income of $600 or more had eight times as great a proportion of physicians as did those with incomes of less than $100 per capita.

When he settles down the physician takes into consideration the community's purchasing power, the accessibility and adequacy of local hospital facilities, proximity to medical schools and teaching hospitals, the degree of urbanization and the presence of professional colleagues. Community wealth is the biggest consideration of all, however, and naturally, so long as doctors must gouge their living out of the wealthier sick.

In rural areas conditions have long been as desperate as they became in better settled localities during the war. The number of doctors in rural North Carolina fell from 1,125 in 1914 to 719 in 1940. In that year, 1940, only thirty-one percent of the State's physicians were in rural areas though seventy-three percent of its population resided there.

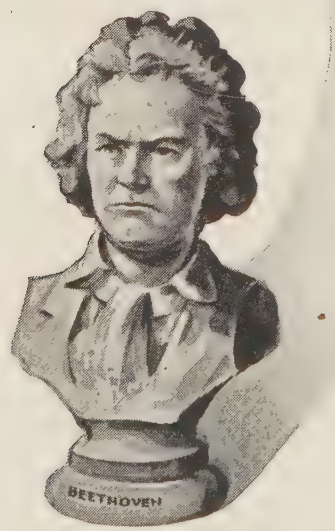
Again the absence of hospitals and big income tends to discourage physicians from settling. Generally speaking counties with per capita incomes below $300 a year and no general hospital had sixty percent fewer doctors in proportion to population than counties with 250 or more hospital beds and the same income level. Polls of doctors in the armed forces also indicate that only about twelve and a half percent of them want to settle in rural areas when peace comes.

The obvious need is for a planned network of medical facilities. These must be properly staffed. They must extend everywhere that people live and their services must be available to all. They should properly operate around medical centers which bring together physicians' offices, diagnostic, clinical, and research equipment and staffs, hospital beds, preventive medicine, and lay medical education.

This requires group practice by doctors, specialists, dentists, surgeons, nurses, and laboratory technicians wherever their services are required. Research and experimentation would be encouraged, the dessemination and exchange of medical knowledge would be stimulated, and doctors would practice under supervision and not as lone wolves isolated from colleagues of greater ability or experience.

These medical or health centers would be placed

Attaining Perfection...



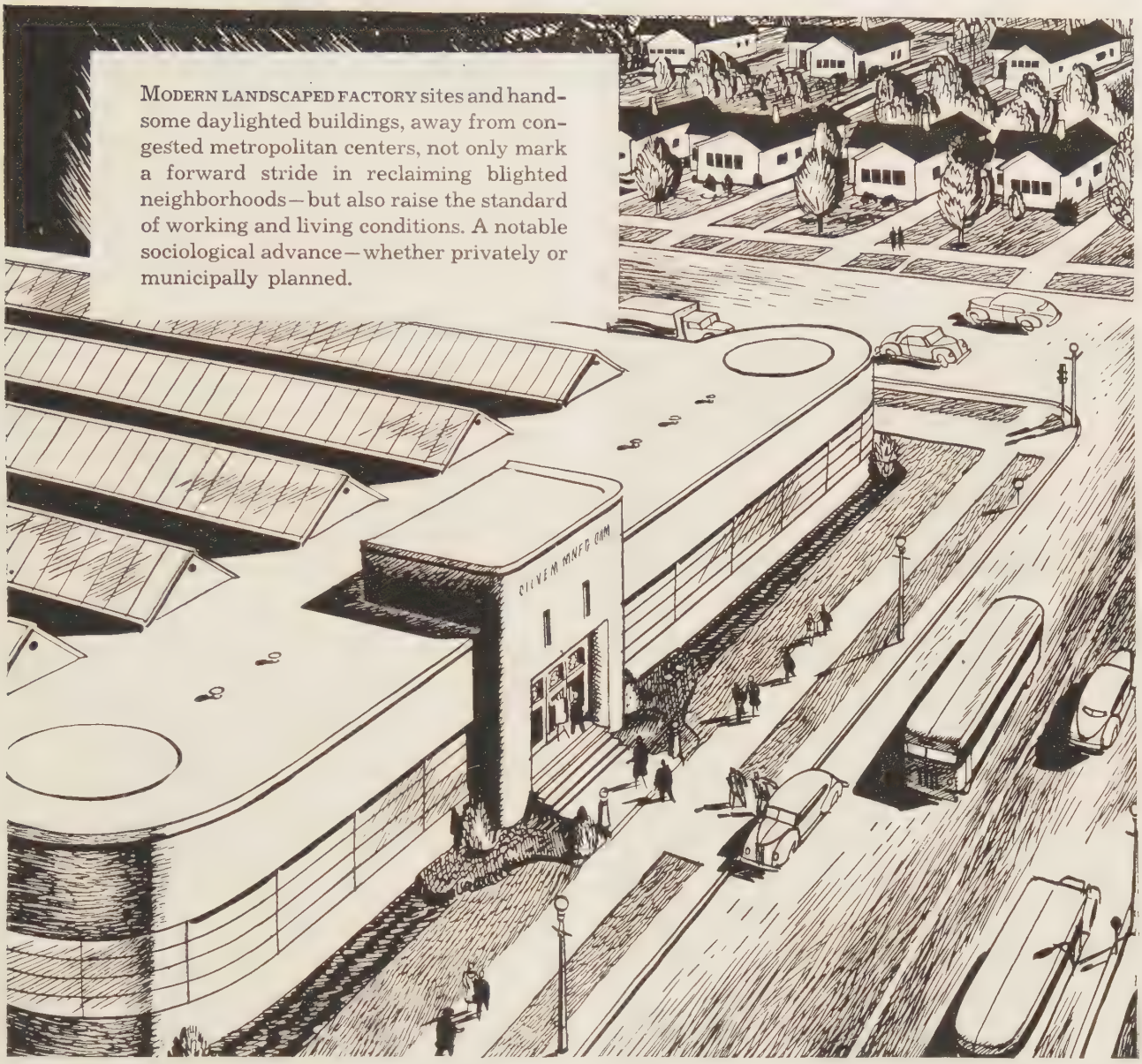
The attainment of perfection is not a simple or easy task. Only those who apply themselves unreservedly can hope to reach this goal.

At Harrower we are pledged to continuous application of rigid scientific and technical controls in the development of specialized products which will continue to merit the increasing confidence of the medical profession.

You can specify Harrower with the confidence that your patients will receive the full benefit of the medicament prescribed.

The HARROWER LABORATORY, Inc.
GLENDALE 5 · CALIFORNIA · NEW YORK 7 · CHICAGO 1 · DALLAS 1

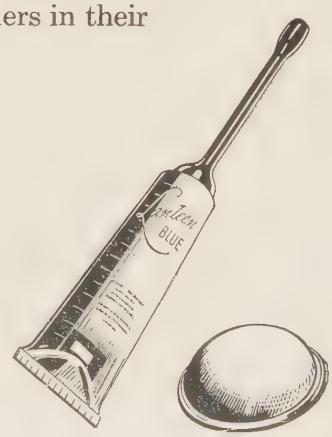
Toward a Better World



MODERN LANDSCAPED FACTORY sites and handsome daylighted buildings, away from congested metropolitan centers, not only mark a forward stride in reclaiming blighted neighborhoods—but also raise the standard of working and living conditions. A notable sociological advance—whether privately or municipally planned.

LANTEEN MEDICAL LABORATORIES also present a clear example of forward planning toward sociological betterment—in their promotion of Lanteen products—leaders in their field, and produced under the most rigid scientific standards.

Since patients are not mechanically minded, simplicity and ease of handling are prime requisities for continued use. Lanteen Flat Spring Diaphragm is extremely simple to place—it is collapsible in one plane only. No inserter required. Complete package with two tubes of Lanteen Jelly and Applicator upon request. Distributed ethically—advertised only to the medical profession—available only upon the recommendation or prescription of a physician.

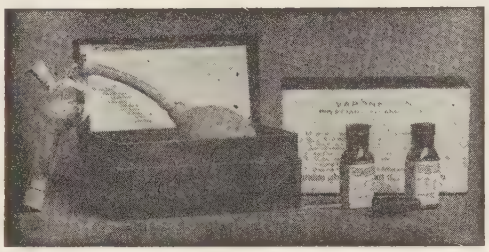


L A N T E E N

COPYRIGHT 1945, LANTEEN MEDICAL LABORATORIES, INC., CHICAGO 10

VAPONEFRIN

PHYSICIANS' ALLERGIC UNIT



Indicated for the Symptomatic Relief of

ASTHMA

THE INHALATIONAL HAND-BULB METHOD

Advantage:

In many cases VAPONEFRIN has shown marked improvement in a short time. The technique is simple; relief is rapid with relative freedom from side effects.

Doctor:

For your allergic patients, allow VAPONEFRIN to solve your problem in even your most troublesome cases.

Supplied by
Ethical Pharmacies Everywhere

VAPONEFRIN CO.

328 South Jefferson Street . . Chicago, Ill.
Phone—Andover 5337

where required and of such size as proved necessary. Rural as well as urban people would benefit from their existence. Large base hospitals would serve major areas. They would be teaching institutions staffed with requisite experts, and fully equipped to assume leadership over the subordinate network of district hospitals, rural hospitals, and health centers.

The cost of this adequate health service could not be borne by localities and States alone. Federal grants-in-aid would be required. However, there would be enormous savings incident to the logical rationalization of medical facilities and the proper distribution of personnel. Furthermore, charity and welfare work would form an integral part of a scientifically organized whole and would operate more efficiently and economically than at present.

Naturally salaried staffs would be required. This would merely mean adoption of the common procedure in other walks of life where the fellow who works on his own becomes more rare every year. It would also mean that physicians would have vacations, sick leave and sabbatical leave with pay, regular hours and the other normal comforts of persons who work on salary.

Would it mean "socialized medicine?" Yes, for it would mean making the science of medicine socially useful to the fullest possible extent, which is all that this phrase really means.

Would it mean State medicine? Not necessarily so. The scheme could be financed in part privately and in part by government. Certain hospitals and physicians could stand aside from the scheme altogether in order to provide the wealthier citizens with somewhat less excellent care at customary exorbitant rates. This would take care of snobs very well.

But such a rational reorganization of medical facilities and personnel must be undertaken to provide good medical care for all. True this is a luxury we have not had in the past but in the post-war world our people may regard it as a simple obvious necessity. Could they be blamed for that? Will they any longer put up with horse-and-buggy doctoring?

Releases of Army Medical Personnel

Substantial releases of Army Medical Department personnel will not take place before the latter part of this year, said Surgeon General Norman T. Kirk in announcing a policy on discharges in conformity with War Department procedures. This is due to the fact that the peak of the Medical Department's activities will not be reached until fall.

In formulating the policy consideration was given to civilian needs for professional medical, dental and veterinary care without weakening military needs. Other factors considered were the length of time necessary for personnel to complete their work in the Mediterranean and European Theaters and return to the United States; replacement of Medical Department personnel in active theaters by those who have not had overseas duty; necessity for the maintenance of a high standard of medical care; the heavy load of patients in the United States; evacuation of the sick and wounded from Europe, and continuing medical service in the Pacific.

The policy also applies to the Veteran's Administration and other agencies.

Announcing

NOW you can administer full and frequent doses of vitamin C without the irritative and undesired effects that frequently result from large doses of ascorbic acid.

The Van Patten Pharmaceutical Company takes pride in offering the medical profession SODASCORBATE Tablets (sodium ascorbate)—the first to provide oral administration of a stable vitamin C in neutral form. Each tablet contains 120 mg. of sodium ascorbate, equivalent in vitamin C activity to 100 mg. (or 2000 U.S.P. units) of ascorbic acid.

SODASCORBATE Tablets are specifically indicated in clinical and subclinical scurvy, and in all conditions where vitamin C has been found of value. Recently reported studies suggest its use in infectious diseases and toxic conditions; in allergy, especially hay fever; in suitable cases of gingivitis and pyorrhea; for lack of energy and endurance associated with vitamin C deficiency; and as a chlorine-free substitute for salt in heat exhaustion.

The average dose for adults and children over 12 years is one tablet three times daily, or as indicated by the condition. For children under 12, one-half tablet. This may be dissolved in milk for babies and young children. Each SODASCORBATE Tablet is scored to permit ready adjustment of dosage.

Supplied in bottles of 40 and 100 tablets, as well as in "hospital-size" bottle containing 500 tablets. For professional samples and covering literature, sign and mail the coupon.

SODA-C

SODASCORBATE
(VAN PATTEN)

A New Achievement in Vitamin C Therapy

"New Horizons in Vitamin C Therapy". Our 32-page monograph, just off the press, offers information concerning newest developments in Vitamin C therapy — comprehensively — authoritatively. 144 bibliographical references make this publication a valuable addition to the physician's library. Mail coupon for your copy, together with professional samples of SODASCORBATE.

VAN PATTEN PHARMACEUTICAL CO.
500 N. Dearborn Street, Chicago 10 MR-8

Please send professional samples of SODASCORBATE and 32-page monograph, "New Horizons in Vitamin C Therapy."

Dr. _____

Address _____

Town _____ State _____

Malaria Control In India

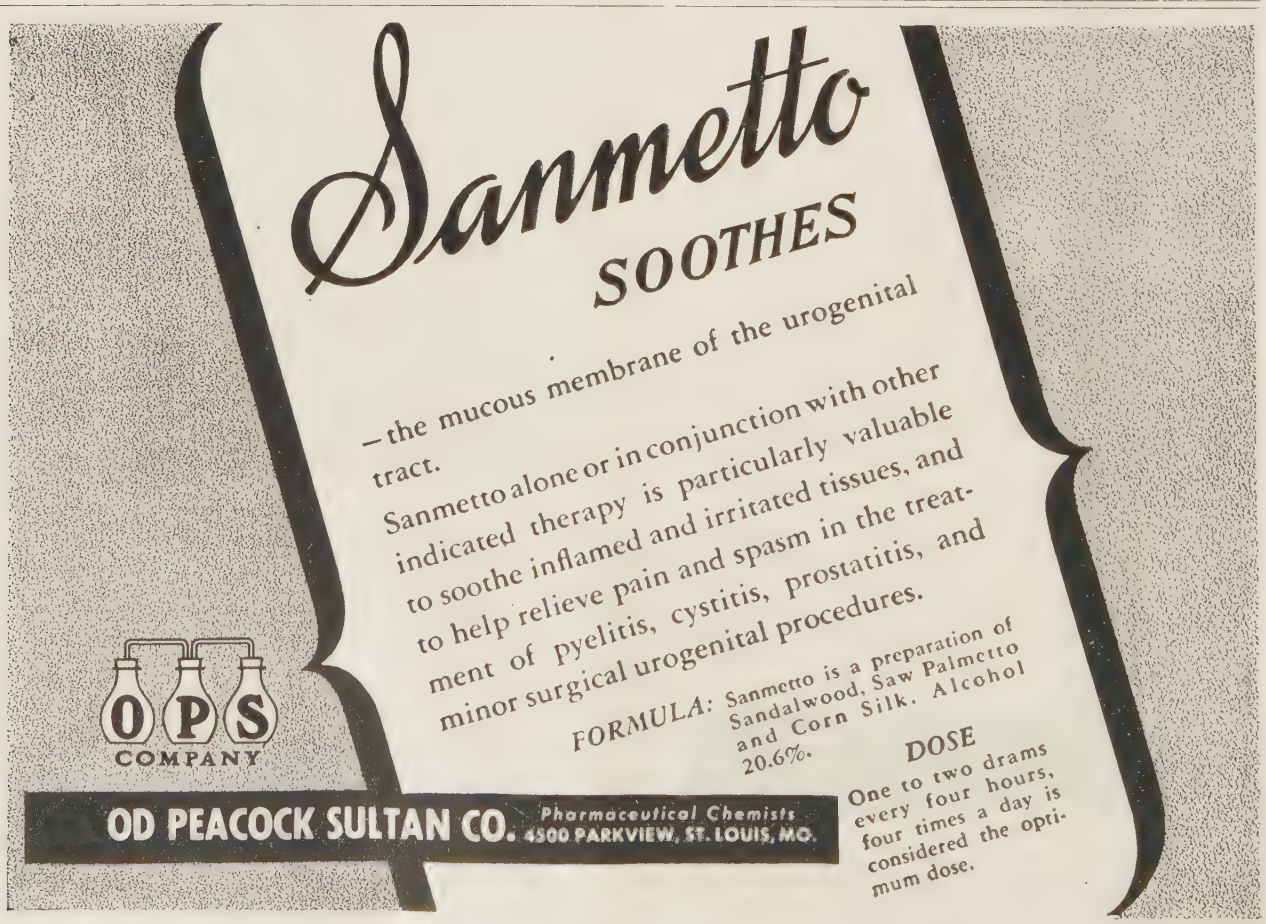
A press release from New Delhi, India, tells of the prolonged, exacting struggle against malaria carried on by medical units in India and Burma. Exact figures cannot be given because of military security, but rigid malaria control in the India Burma theater has cut malarial incidence among American troops to a fraction of the casualties from the disease during the early appearance of American troops in Upper Assam and northern Burma—areas where the native population was infected almost one hundred percent. Stringent control measures have reduced the malarial rate to less than one-eighth of the original figures predicted by British officials.

When troops first arrived in India, they were told that the greatest deterrent to the accomplishment of the American mission was malaria. These predictions were based on vital statistics which showed that more than one hundred million persons are afflicted with malaria every year in India, and that more than one million of these die from the disease every year. At that time—early 1942—Indian and British troops fighting in the one hundred percent infected areas of Assam and Burma had suffered many times more casualties from malaria than from enemy action. Often malaria alone decided the issue, and quite often the decision was in favor of the Japanese.

For twenty years an American doctor, Earl M. Rice, had operated his own hospital in Assam. He knew the country intimately, spoke the native language fluently, and had made a lifetime study of malaria. His specialty was tropical medicine, and with a specialist's knowledge of malaria and with his long residence in the heart of the area where malaria had to be whipped, he was the ideal man to handle the job. He was commissioned a lieutenant colonel in the Army Medical Corps and assigned the task of controlling malaria which, if left unchecked, would most surely neutralize the American effort in India and Burma.

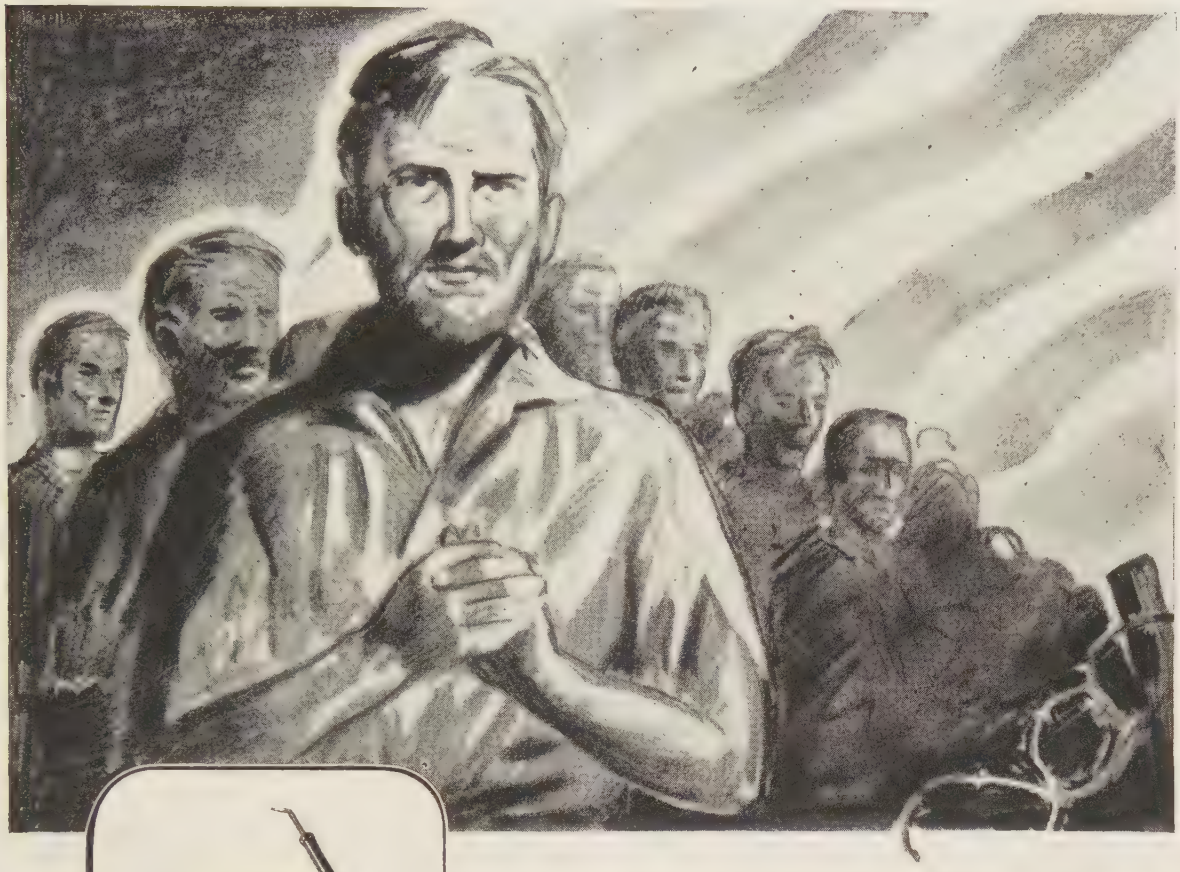
Meantime, as a result of medical experience on Guadalcanal, two types of organizations were being formed and trained in the United States to combat malaria—control units and survey units. Control units consisted of a sanitary corps officer with engineering background and eleven enlisted men. Their job was actual physical control—drainage to eliminate breeding spots, oil and Paris green spraying to kill larvæ, mosquito-proofing quarters to prevent bites by the infected insect, and spraying to kill the adult mosquito. Survey units laid the groundwork for control. They evaluated areas as to their relative importance as breeding centers, decided which to treat first, and examined blood and spleens of native children to determine incidence. Their personnel consisted of two officers, an entomologist and a parasitologist, and eleven enlisted men. Equipped with complete portable laboratories, these highly trained specialists worked ahead of and with the control units. Shortly after Colonel Rice took over his tremendous job, two of each of these units were obtained from the United States and put to work. During the ensuing period, the number of survey and control units were increased.

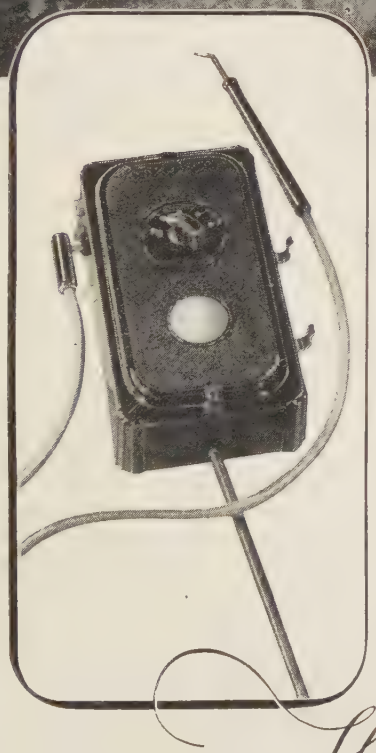
Late in 1944, the India Burma theater began to receive quantities of DDT, and it was possible now to


Sanmetto
SOOTHES
—the mucous membrane of the urogenital tract.
Sanmetto alone or in conjunction with other indicated therapy is particularly valuable to soothe inflamed and irritated tissues, and to help relieve pain and spasm in the treatment of pyelitis, cystitis, prostatitis, and minor surgical urogenital procedures.
FORMULA: Sanmetto is a preparation of Sandalwood, Saw Palmetto and Corn Silk. Alcohol 20.6%.
DOSE
One to two drams every four hours, four times a day is considered the optimum dose.
O P S
COMPANY
OD PEACOCK SULTAN CO.
Pharmaceutical Chemists
4500 PARKVIEW, ST. LOUIS, MO.

MOTIVES OF MEN

One Was A Doctor!





Because of his skill, his comrades lived. In prison camps and elsewhere, all over the world, men, women and children cry for aid and the doctor steps forward, trained and ready to serve . . . proud of his great profession. Recognizing the obligation which is his, he rightfully demands the best equipment that science and industry can provide.

The Birtcher Hyfrecator *is a compact and efficient instrument for general practitioner or specialist, enabling him to treat more cases in less time, with a simple office procedure requiring no before or after treatment.* HYFRECATION *accomplishes more than 33 proven technics.* $37.50 *complete.*

The BIRTCHER *Corporation*

5087 Huntington Drive • Los Angeles 32

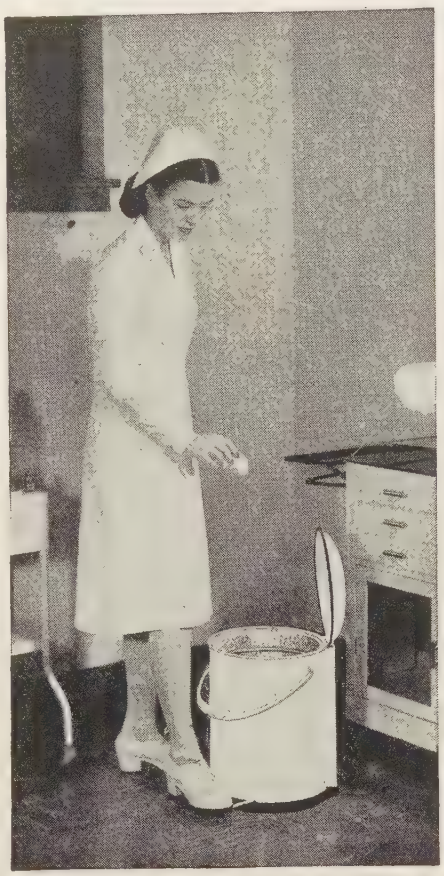
THE BIRTCHER CORP., Dept. M,
Los Angeles 32

Send me free illustrated booklet,
"Symposium on Electrodesiccation".

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____



THE MEDICAL

Sanette

This new Sanette professional waste can will *brighten up your office* and lighten your work. Its easy-acting foot pedal raises the cover and leaves both hands free. An extra handle permits it to be moved about easily. Its rubber feet protect the floor. And the removable pail is protected with rust and acid resisting hot-dipped galvanized coating, — easily cleaned and leak proof.

Model H-12 (15" high, 10" dia.) is designed for doctors' offices, first-aid rooms, clinics and operating rooms. In gleaming white enamel baked on, —it is available at your dealer.

MASTER METAL PRODUCTS, Inc.
267-H CHICAGO ST. BUFFALO 4, N. Y.

use it in the native villages and habitations which had always constituted a major menace as reservoirs of infection. To cover large areas, DDT was sometimes sprayed from planes. These measures had the mosquito on the run—for permanently situated individuals. For those who move in an out of an area, atabrine was found effective in treating the benign type of malaria and usually prevents malignant malaria. •

Great strides have been made since Colonel Rice began the pioneering job of stamping out malaria in the worst area in the world. It has not been eradicated completely, nor will it be until control measures are universally adopted, but the rate for American troops has dropped below all previous hopes, and there is every reason to believe it will continue to decrease.

Colonel Rice has moved out of Assam to Ceylon, where for the past seventeen months he has served as medical adviser to Lord Louis Mountbatten, supreme commander of the Southeast Asia Command. The malaria fight at present in India-Burma is being carried on under the direction of Colonel Karl R. Lundeberg, chief of the preventive medicine section in the theater surgeon's office. Direct staff supervision of the control fight is handled by Major Maurice Seltzer, of Philadelphia, Pa. Malariologists in each of three districts in the India Burma theater coordinate the activities of malaria units, both survey and control.

Basal Temperature Records to Aid Infertility Treatment

A basal temperature record to aid in determining the probable time of ovulation in individual women is being made available by the Medical Committee of the Planned Parenthood Federation of America to physicians interested in the treatment of infertility and the planning of conception. As reported by Dr. Pendleton Tompkins in the *J.A.M.A.* (March 11, 1944), it has been found that an accurate daily record of basal temperature is valuable in estimating the optimum time for conception.

There is a slight rhythm of variation in the normal temperature of a healthy woman—the temperature being lower during the first half of the menstrual cycle than during the later half. The transition from the lower level to the higher one occurs at about the time of ovulation. In many cases the temperature will show a sharp drop and then shoot immediately to the higher level which can be taken as an indication that ovulation is taking place. As the variation for the entire cycle may be less than half a degree, the patient must be provided with complete instructions and forms with which to plot her temperature accurately. The temperature is taken rectally each morning immediately upon awakening before the patient has gotten out of bed, talked, eaten, drunk or smoked.

The charts, as provided by the Planned Parenthood Federation, provide for a six month's record. They indicate the calendar months, the length of the individual cycle and the number of days backward from the onset of the menses at which ovulation can be estimated to occur.

The charts, together with the instruction forms for the use of the patients, are available at cost through the Medical Department, Planned Parenthood Federation of America, Inc., 501 Madison Ave., New York 22, N.Y.

"...SURGEON NEEDED IMMEDIATELY FOR EMERGENCY OPERATION"

Ship transfer on the high seas—that's just one of the hazards of war confronting the Navy surgeon.

Yes, the medical man in the Navy—in any of the armed services—shares many of the same risks and the same exhausting hours of duty as the man behind the gun. And, like any other fighting man, he enjoys the cheer and comfort of a few minutes' relaxation with a good cigarette... very likely a Camel, for Camels are a fighting man's favorite around the world.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

CAMEL

COSTLIER TOBACCOS

BRUCELLOSIS
(UNDULANT FEVER)

★ 10% of the population of this country has been infected—as estimated by Gould and Huddleson, 1938.

★ Brucellosis should always be suspected and ruled out, wherever low grade fever, or extreme fatigue, headaches, etc. are persistent. Investigators have stated that 25% of all chronic cases will react positive to Brucellosis, when tested.

★ Brucellosis now has been recognized as an important public health problem in this country, according to Carpenter.

COLMETANESE

★ Clinical reports from doctors who have treated their Brucellosis cases with Colmetanese are uniform.

NON-TOXIC
NO REACTIONS
NO INTOLERANCE
RESULTS ARE PROMPT

12 five cc. AMPOULES $10.00
25 five cc. AMPOULES 17.50

FARNSWORTH LABORATORIES
28 E. Jackson Blvd.
Chicago 4, Illinois

SEND COUPON TODAY!

Please send me
..... box Colmetanese—12 five cc. ampoules at $10.00 per box
..... box Colmetanese—25 five cc. ampoules at $17.50 per box

Dr. .....
Address .....
City & State .....

MR-8-45

Dr. Dickinson's Sculptural Models Acquired by Cleveland Health Museum

Dr. Lester Taylor, president of Cleveland Health Museum, announces that the one hundred R. L. Dickinson sculptural models of human reproduction have been acquired by the Museum for display and for distribution to medical, nursing and health groups. Distribution of these models, which are unique in the history of medical science, will help make maternity safer for mothers and babies all over the world.

The acquisition was made possible through the Prentiss Foundation. Elizabeth Severence Prentiss, founder of the Foundation, gave the original building to the Museum, contributed to it while living and left it an endowment at her death in January 1944.

The collection includes: Standard figures of the adult male and female, and of the newborn baby; pregnancy and labor; anatomy of male and female reproductive organs; venereal diseases; some surgical operations; full-size manikin for teaching delivery to medical students; the World's Fair series showing childbirth in successive stages; six small models for the doctor's desk for explanation to patients or students; and others for specialized uses.

The Museum acquires possession and control of distribution of the models and option on future additions to the collection, and will thus be in a position to make copies from the originals for other institutions. For multiple reproduction, nothing of this detail and scientific accuracy or artistic merit exists in this country or abroad.

The models are the result of sixty years of study and research by Dr. Robert Latou Dickinson of New York. They are based on *life* studies, as contrasted with measure based on postmortem examinations. Never before has the growth and delivery of a baby been sculptured in three dimensions for teaching purposes. The models showing the mechanics of birth and the involution of the uterus were made from the findings of thousands of roentgenograms, taken in Johns Hopkins, Sloane, Bronx, Harlem, and New Haven hospitals. "Norma", the standard female figure, represents measurements of more than fifteen thousand individuals.

Part of Dr. Dickinson's exhibit was shown for the first time at the New York World's Fair Hall of Man, where Dr. Bruno Gebhard (now director of Cleveland Health Museum) was technical consultant. More than seven hundred thousand persons saw them at the Fair, an average of five thousand a day. Later the Maternity Center Association of New York utilized the models in its "Birth Atlas". These included the models showing growth of the baby from conception until fully developed and ready to be born. This section of the Dickinson models has been displayed in the Museum's Mother and Child Room since the Museum was opened in 1940.

Models a Blending of Science and Art

Dr. Dickinson might be called "the Havelock Ellis of our times, with a dash of Leonardo da Vinci". The models are not only strictly accurate in measurements and proportion but they attain the level of true art in their lifelikeness, their decorative character, and their striking points of view, especially in the Birth Series.

Birth Prelude is a circular plaque on which infant figures represent embryos in ten successive stages of

RIASOL *and* PSORIASIS

Direct, local therapy of psoriasis with RIASOL holds high rank *because it does exactly what it sets out to do.*

RIASOL clears psoriatic lesions.
RIASOL prolongs remissions.

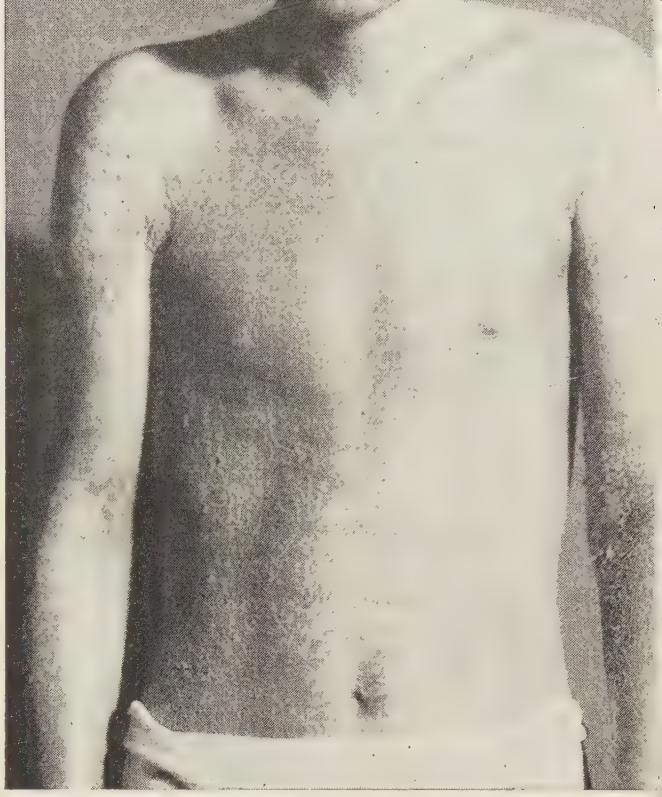
Cases resistant to many other methods attempted have yielded promptly to RIASOL's formula and its unique low surface tension fluid.

RIASOL contains 0.45% mercury chemically combined with soaps, 0.5% phenol and 0.75% cresol in a washable, non-staining, odorless vehicle.

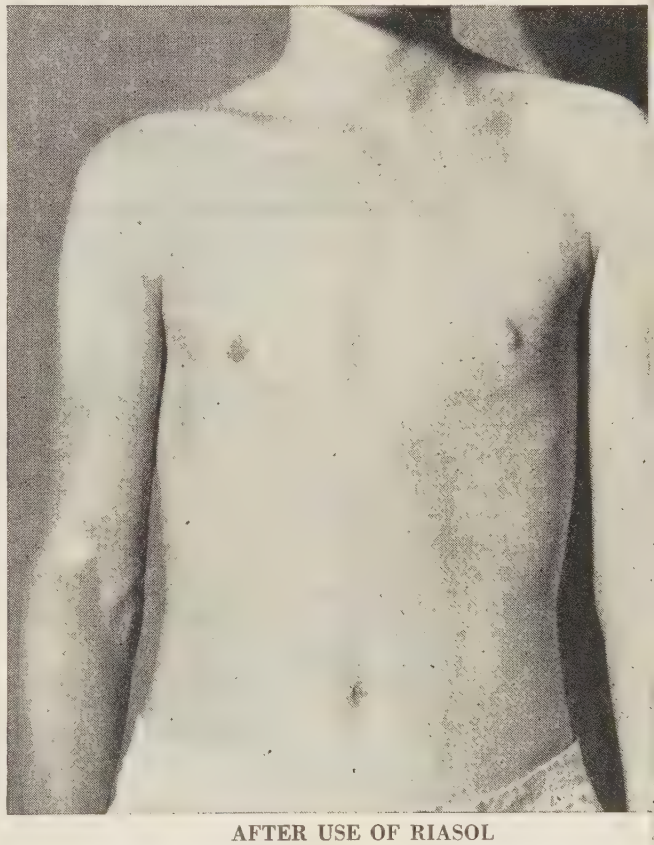
Apply RIASOL daily after a mild soap bath and thorough drying. A thin, invisible, economical film suffices. No bandages needed. After one week, adjust to the patient's progress. RIASOL may be applied to any area, including face and scalp.

RIASOL is not publicly advertised. Supplied in 4 and 8 fld. oz. bottles, at pharmacies or direct.

Generous clinical package free on request. Prove RIASOL yourself. Test it out on a real stubborn case. Use coupon below.



BEFORE USE OF RIASOL



AFTER USE OF RIASOL

SHIELD LABORATORIES MR-8-45
8751 Grand River Ave., Detroit 4, Mich.

Please send me professional literature and generous clinical package of RIASOL.

_____ M.D. _____ Street

City _____ Zone _____ State _____

Druggist _____ Address _____

MAIL THIS COUPON TODAY AND TRY RIASOL ON YOUR NEXT PSORIATIC CASE

RIASOL for PSORIASIS

growth. Their relaxed limbs give the impression they are floating in air. The largest figure holds one of the smaller in his cupped hand.

In *Birth Relief,* the sculptor endows the unborn babies with the sleepy, serene placidity that only baby faces can express. In the *Quintuplets,* or "Horn of Plenty", the softly-rounded bodies huddle in close and warm comfort, one fitting into the other in complete indolence. This model was approved by the late Dr. Allan Roy Dafoe, the Canadian physician who cared for the Dionne quintuplets.

Twinning illustrates the difference between identical and fraternal twins. An interesting aspect of this plaque is that the babies illustrate the adage "See no evil; hear no evil; speak no evil", by their postures.

"Birth Rest Book Ends" show the figure of a baby with crossed legs seated before the pelvic structure. *Three Sizes of Newborn* shows relative sizes and weight of the largest (twenty-three and a quarter pounds) and the smallest babies ever born, with a newborn figure of normal size for comparison.

For Parental Education

Dr. Gebhard says: "For centuries, new parents went for advice to grandma or some other wise old woman, whose experience in family life was of practical value. Then modern life disintegrated the former close intimacy of families, and parents took to the library for advice on rearing children. This period of one eye on the book and one on the baby has passed, to considerable extent. Present-day teaching emphasizes visual education for parents—as in the Health Museum's mother and child room. With the acquisition of the complete series of the Dickinson models, the Museum's value in the field of parental education will be so increased in one step that it may look forward to teaching the nation about babies through the use of this unprecedented collection".

Public Health in Mexico

For the purpose of coordinating public health work in Mexico the Department of Health and Public Welfare was created in 1944, according to the *Bulletin of the Pan American Sanitary Bureau,* February 1945. There are 798 health centers throughout the country maintained by an annual budget of about $4,235,000.

Owing to intensive campaigns against smallpox, tuberculosis, malaria, venereal diseases, diphtheria, typhoid and typhus, general health conditions in the country have greatly improved over previous years. During 1943 the general mortality rate was 21.5 per 1,000 inhabitants, as compared to 22.22 during 1941. Infant mortality decreased from an average rate of 123.5 per 1,000 live births during 1928-1942, to 116.6 in 1943. Birth rate reached 44.5 per 1,000 inhabitants.

During the year twenty-one towns were provided with water works, work progressed in twenty-six other villages and towns and water supply projects were started in seven others. Surveys were made for similar projects in sixty-two other towns. Eighteen urban and rural sanitation projects were completed and twenty others were planned. Drainage works and sewage disposal projects were planned in a number of localities.

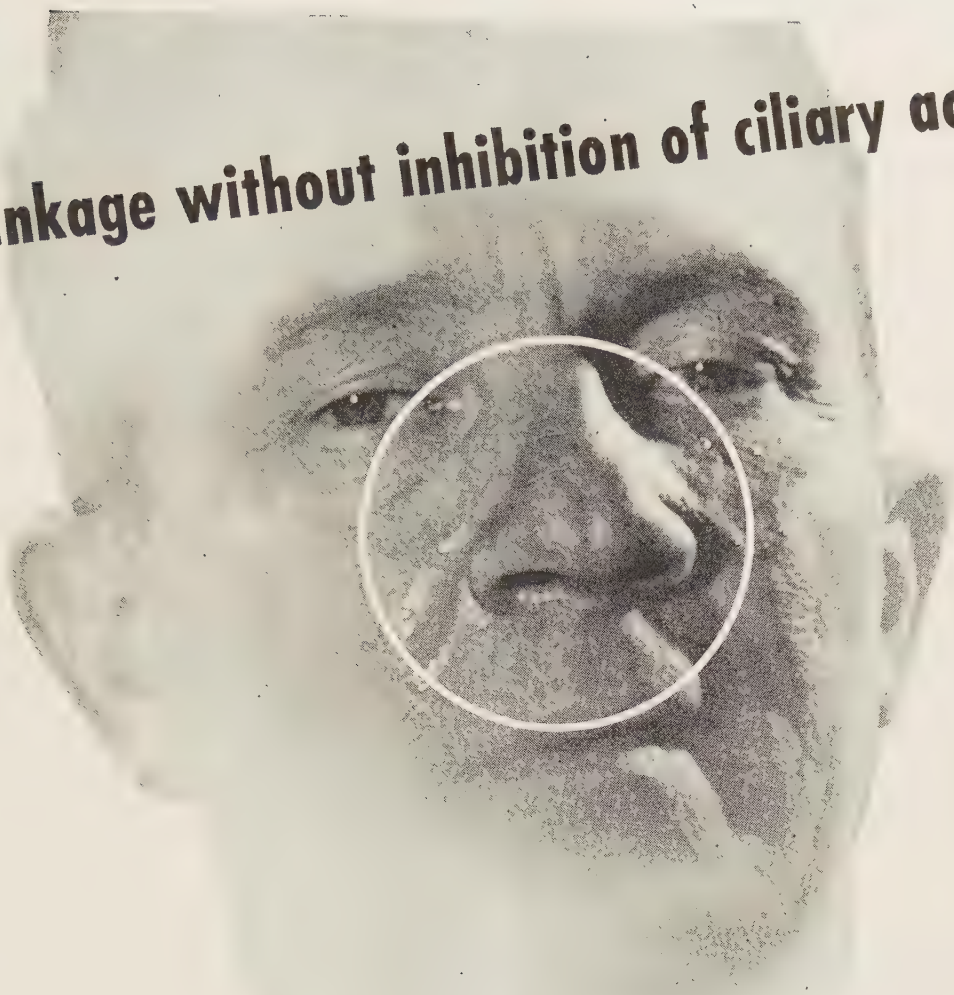
PASADYNE

may be used whenever a potent sedative is needed, with every assurance that it will meet fully the demands made upon it.

Especially when a sedative must be continued over long periods will PASADYNE demonstrate its unusual therapeutic power as well as freedom from evil effects.

JOHN B. DANIEL, INC. ATLANTA, GEORGIA

Shrinkage without inhibition of ciliary action



Prompt, long-lasting shrinkage of congested nasal mucosa *without inhibition of ciliary action* is afforded by 'Vaporole' Ephedrine Isotonic Solution (Aqueous) —an effective, non-irritating vasoconstrictor with modified Locke's solution as its vehicle. Indicated in hayfever, coryza, sinusitis, rhinitis.

'VAPOROLE' EPHEDRINE ISOTONIC SOLUTION (Aqueous)

containing 1 percent ephedrine in an isotonic solution of sodium, potassium and calcium chlorides and dextrose (modified Locke's solution).

Bottles of 1 fluidounce and 1 pint.

'Vaporole' Trademark Reg.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 East 41st St., New York 17

Cardiac Sustainer of the

HYPERTENSIVE HEART

CACODYNE special iodine and cacodylate furnish glandular nutritional sustenance for sustained cardiovascular relief in hypertension, angina pectoris and allied conditions. Minimized arterial occlusion, cellular exudate and cholesterol deposit improve coronary and general circulation. Hundreds have shown improvement upon administration of . . .

CACODYNE

Isotonic Colloidal Iodine Cacodylate

Send for Details and Reprints

RESEARCH MEDICATIONS

Distributors

542 Fifth Avenue New York 19, N.Y.

VISION

Vision is the fountainhead of both laboratory research and clinical accomplishments. Because America's laboratories and American doctors have been endowed with vision, the state of public health has steadily improved, even under the restrictions imposed by war.

VITAMINERALS is proud of its part in cooperating with the Profession toward bringing to Americans more abundant health.

Send for the "VITAMINERALS MANUAL"

VITAMINERALS CO.

3636 BEVERLY BLVD., LOS ANGELES 4, CALIF.

The onchocerciasis problem in the States of Chiapas and Oaxaca received attention. There are twenty anti-leprosy dispensaries and one leprosarium at present in the country. Work was started on the installation of a Cancer Central Dispensary in the General Hospital in Mexico City.

Prices of drugs have been kept under control. There are 256 mother-child health centers in the country which have been very active. The National Institute of Cardiology was opened on April 18, 1944. Regulations were issued for the new Department of Health and Welfare, the National Committee for the Control of Penicillin, and Shellfish Control. Public Health courses were given in various States, as well as four courses for Public Health Nurses.

A Social Security plan was initiated in the Federal District in January 1944. Up to July 500,000 laborers and their families had made 1,365,000 calls. Thirty-one clinics, 117 dispensaries and two hospitals are being used for this purpose.

Preventive Medicine Accomplishments in the Mediterranean Theater of War

According to a recent release from the Office of the Surgeon General, Washington, D.C., there were many outstanding accomplishments in the field of preventive medicine in the Mediterranean theater of war. In most previous wars deaths from disease equalled or surpassed battle deaths, but through March 1945, deaths from disease in this theater of war totaled approximately 585, as compared with 2,394 caused by nonbattle injuries and about 29,000 resulting from battle. Noneffective rates, excluding battle casualties, for 1944, even during the winter months, were kept nearly as low as those in the United States.

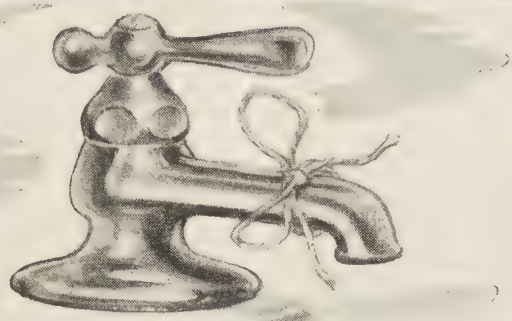
Malaria was brought to low levels in 1944 and thus prevented from interfering with operations, although Sardinia, Corsica, Sicily and Italy are among the most malarious areas of the world. Armies operating in Italy often have been immobilized completely by malaria. Typhoid fever has decimated many armies, but control methods in the Mediterranean Theater were so effective that only 161 cases were reported. There were only twelve cases of smallpox. Intestinal disease was kept at low levels by means of strict sanitation in units and the use of DDT to kill flies. The use of raw fruits and vegetables for troops was permitted because for the first time in history, a means of sterilization employing chlorine was available.

Equipment and methods for preventing trench foot were established in this theater of war.

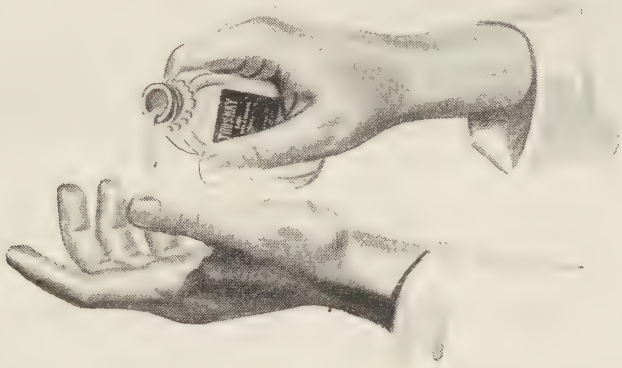
For the first time in history, louse powder (DDT) was used successfully to extinguish a typhus epidemic. Rockefeller Foundation teams, working in cooperation with the surgeon, evolved methods for using the powder during experimental work in North Africa. Later, with the cooperation of the United States Typhus Commission, these methods were used in dusting an entire population in Naples in 1943. Only nine mild cases of the disease were reported in the Army with no deaths. There were no "cooties" in this war and lice were not a problem.

For the first time in history a safety program was instituted in an active theater of war, thus reducing material losses, accidental injuries and accidental deaths.

WHAT'S A STRING DOING ON A FAUCET?



It's to remind you NOT to wash your hands—until you *first* apply Trushay



Frequent washings remove the skin's natural lubricant . . . leave your hands red and rough. A few drops of Trushay, applied *before* washing, forms an invisible film which helps guard against the harsh effects of cleansing agents ... keeps hands soft and pliable.

If your hands are *already* dry and rough, Trushay will help restore their natural smoothness.

Recommend Trushay to patients. They will appreciate your interest.

Trushay THE "BEFOREHAND" LOTION

A Product of BRISTOL-MYERS COMPANY, 19NH W. 50th St., N.Y. 20, N.Y.

Syntropan has the desirable, antispasmodic actions of belladonna or atropine, but does not depress salivary secretion as actively nor induce mydriasis as readily. When used to induce mydriasis, its influence is not as profound nor as long in duration as that of atropine. The inhibitory action of Syntropan on the parasympathetic innervation of the heart is negligible and not as pronounced as that of atropine. Syntropan has a definite antispasmodic action on spastic smooth muscle, the antispasmodic influence being due jointly to inhibition of the parasympathetic innervation and to direct peripheral relaxing action on the muscle fibers themselves . . . HOFFMANN-LA ROCHE, INC., NUTLEY 10, NEW JERSEY

Syntropan 'Roche'—FOR THE RELIEF OF SMOOTH MUSCLE SPASM

MEDICAL RECORD

PUBLISHED MONTHLY BY
THE MEDICAL JOURNAL AND RECORD PUBLISHING CO., INC.

VOL. 158, NO. 8 AUGUST 1945 WHOLE NO. 2751

ARTHRITIS AS SEEN BY AN ORTHOPEDIST

OTTO C. KESTLER, M.D.
New York, N.Y.

"Orthopedic surgery is a branch of surgery concerned with the preservation and restoration of the function of the skeletal system, its articulations and associated structures."* This definition is self-explanatory—it makes it clear that arthritis is more or less an orthopedic problem.

There are two main problems to be solved in the arthritic patient: 1, the systemic disease; 2, the functional impairment.

It is my opinion, based on experience, that rheumatoid arthritis and osteoarthritis are complex conditions, in which a series of different etiological factors are involved. These factors should be considered individually, but simultaneously, in the course of treatment. Each single factor has to be treated by different means of medication at the same time.

Systemic Factors

Among the systemic factors we have: 1, infection; 2, metabolic disturbances; 3, glandular imbalance; 4, aging process (wear), and 5, deficiency diseases. All of these factors, or at least two or three, are present at the same time in an individual patient whose constitution is not normal. However, there is variation as to the preponderance of the dominating factor. Types apparently being entirely infectious or metabolic were proved to be of mixed etiology.

As I have discussed elsewhere the comprehensive simultaneous treatment in its medical relations, this paper is concerned only with the orthopedic angle and to a lesser extent with the physiotherapeutic angle, of the three approaches which, in my experience, should always be exercised simultaneously in the management of the arthritic patient.

I agree with the classification of arthritis accepted by the American Rheumatism Association and the New York City Committee on Arthritis Clinics. However, for practical purposes and simplicity the arthritis problem can be divided into the following three groups of cases:

1. Real rheumatoid arthritis and rheumatoidiform arthritis. 2. Hypertrophic or osteoarthritis. 3. Pseudorheumatoid arthritis. This paper is concerned only with the third group.

*This is the accepted definition of the American Board of Orthopedic Surgery, for the words "orthopedic surgery".

Pseudorheumatoid Arthritis

This group consists of joint affections produced merely through disturbance of the skeletal mechanics—faults in body mechanics. From the orthopedic point of view, this is the most important group. However, we cannot stress enough the necessity of orthopedic consideration of the two other aforementioned groups. In my opinion, localized affections of the periarticular tissues, such as bursitis, frozen shoulder or tenovaginitis, should be classified in this group, too, mostly for practical reasons. It is not necessary to stress how often these latter conditions are referred to as being arthritic. Par excellence orthopedic conditions causing symptoms in neighboring joints belong in this group, e.g., knee pain in affections of the hip, knee pain with or without effusion caused by bow legs and compensatory valgus feet, etc.

We can see from the aforementioned facts that arthritis is a complex disease, not only by its etiological variation in the same subject at the same time, but because of the complexity in affecting the individual both systemically and locally. This has to be considered in the management of the patient; orthopedic, medical and physiotherapeutic influences have to be exerted.

Orthopedic Considerations

Generally speaking, this is almost always a much-talked-of consideration, simply because there is either no time for the patient to be referred to the orthopedist, or orthopedic attention is given to the patient by non-orthopedists, sometimes assisted by the surgical supply people. While real rheumatoid arthritis is almost never caused directly by faulty body mechanics, they can maintain and aggravate it, if not corrected.

There are three stages in the management of the arthritics when the orthopedist should have a decisive rôle:

1. In the examination to eliminate errors in the establishment of diagnosis—errors with which we are often confronted, such as when mechanical changes—faults in body mechanics are dominating the picture. This does not apply to the routine cases of flat feet or everted heels, or to knee, hip and low back pain, because these are usually recognized. The orthopedist should not be limited to the arthritic patient's arches, whether flat feet are present or not. Whenever a joint

is involved, whether it be hip, knee, lumbosacral or sacroiliac, it is immaterial whether or not the patient has flat feet. Polyarticular thinking, which means that one must look out for the joints below and above the affected one, is indispensable in the successful treatment of arthritis. Every distressed joint needs support, and one way is from below through an arch support. Arch supports and braces should be highly individualized. They should be light and never hold the foot or the heel in eversion. The best way to prevent an arch support from everting the heel or foot is to make the plaster impression in a neutral, slightly or greatly overcorrected position, depending on the individual case, but never with the patient in a weight-bearing position. And even this may not be sufficient, because the shoe may be in a valgus position, pushing the foot with the arch support into a valgus position. Therefore, the shoes have to be corrected, too.

Reversible Deformities

2. The second stage of orthopedic function is what the author describes as *reversible deformities* in the connective tissues about the joints, referring primarily to contractures and limitations of joint motions caused by the involvement of connective tissues. These can involve any joint—shoulder, elbow, wrist, hip, knee, ankle and, last but not least, the metacarpophalangeal and metatarsophalangeal joints. Usually little attention is paid to those last small joints and to the ankle joints but I wish to stress how extremely vital it is to recognize the involvements of these joints in this reversible stage when normal function can be secured. But only orthopedic thinking and knowledge can do it.

It should be borne in mind that these joints, giving the impression of being completely ankylosed clinically (not roentgenologically) in numerous instances, can be mobilized and satisfactory function can be achieved. For example, the fixation of an ankle joint, a subastragalar joint or that of the forefoot can be muscular, ligamentous or articular, reaching as far as bony ankylosis. This fixation can be due just as well to a preliminary flat foot condition as to rheumatoid or osteoarthritis. With the exception of complete bony ankylosis these fixations can be overcome through orthopedic procedures, sometimes in combination with physical therapy. This second group is the one where orthopedic procedures, such as traction, manipulation, the application of plaster-of-Paris and certain minor surgical methods, have to be applied.

In contractures involving joints participating in locomotion the patients should be hospitalized and traction applied. I prefer the use of traction to the application of plaster-of-Paris, in the absence of irreversible bony changes and in contractures not present longer than six months. These contractures do respond very well to traction followed by massage and any type of exercises, including pool exercises. On the other hand, if stretching has to be done, it should be gentle and always under general anesthesia, and followed by the application of plaster-of-Paris which should remain on for two weeks at least. Recurrences must not discourage the surgeon. They are to be expected and occur quite frequently. Repeated gentle stretchings can be done without harm to the patient.

3. When irreversible bony changes, or particularly irreversible capsular contractures, have developed, operative orthopedics is the proper form of treatment. When a surgical procedure is being considered, except in the case of arthroplasties, as a general rule it is not necessary to wait until the blood sedimentation rate has been reduced to normal.

Surgical Procedures

The rehabilitation of the chronic, deforming type of polyarthritis is a special chapter in orthopedic surgery. It is amazing what we are able to do, particularly if not too many joints are involved. In many instances, this is not only a preventive measure to be applied to the joint involved in the disease, but to the joints below and above the diseased one. Synovectomies, patellectomies, capsulotomies, osteotomies, arthrodeses and arthroplasties are the most common procedures applied. If only one joint is involved, the rehabilitation is comparatively simple. Patellectomy or synovectomy may give a good end result, even in bilateral cases, if progressive bony changes are absent. If several joints are involved, particularly in the lower extremities, careful consideration must be given to the methods chosen. The rehabilitation of such cases usually needs several operative interventions and involves several years until completed. It is my experience that if both lower extremities are involved it is always safer to fuse one side in order to have a stable weight-bearing limb and to try to keep as many joints of the other limb as mobile as possible. Bilateral subluxations of the knee joint may be successfully treated by posterior capsulotomy. However, if bony changes are advanced it is safer to fuse one side. We have to keep in motion or mobilize the other side.

Arthroplasties

There is no other surgical procedure that needs as careful consideration as the mobilization of a fused (ankylosed) joint due to any type of arthritis. While arthroplasty is, on one hand, the question of the technique used, accompanied by numerous small tricks, the outcome is dependent upon the observance of strict general rules, as follows:

1. The underlying disease has to be completely quiescent for at least three years.

2. Infectious foci have to be completely removed. After their removal, local and general reactions have to be carefully followed, and, if subsided, a waiting period of one to two years should be considered.

3. The blood sedimentation rate must be normal. If it is not, it must be brought to normal by medical treatment.

4. The patient has to be in perfect condition as far as nerves and general health (resistance) are concerned.

As far as the surgical part is concerned in weight-bearing joints, I am always more anxious to have only moderate motion and more stability than normal motions, with less or no stability. Traction and early motion after operation seem to be vital, motion beginning on the third day after operation and gradually increasing. Weight-bearing starts three weeks after the operation. It should be done gradually and with the aid of braces. Early physical therapy, with active, passive exercises and massage, cannot be overstressed.

It has been my experience that if these measures are strictly followed the results will be most satisfactory.

140 EAST FIFTY-FOURTH STREET

TRAGEDIES OF THE UTERINE INCISION INCIDENT TO CAESAREAN SECTION

J. W. KENNEDY, M.D.
Philadelphia, Pa.

There is little doubt but that the uterine incision following cæsarean section is the most fertile cause of uterine rupture of the pregnant uterus. The reprehensible and rapid increase in the number of cæsarean operations which are being performed in America will add materially to the number of uterine ruptures with the usual dire results.

There is no experience to refute the statement that rupture of the pregnant uterus is the greatest tragedy which faces the pregnant patient and prospective child. The experience of two ruptured uteri within a week, following cæsarean operations, is the immediate suggestion for this paper.

Just how much protection to the patient is the accepted teaching, or at least the well known statement, "if once a cæsarean, always a cæsarean"? In reality just how much protection is the physician, who has performed a cæsarean section on a particular patient, should she subsequently become pregnant? Is it enough to say to the patient, should she become pregnant, we will do a second or a third cæsarean section? Does this safeguard the patient in her following pregnancies? In no sense is this true and the knowledge of such an eventuality should stimulate a greater degree of protection to the pregnant woman.

Throughout my experience extending over a great number of years, in more than ninety-five percent of the ruptured uteri, upon which I have operated, the rupture had occurred before the eighth month and even earlier. This is the reason that the uterine incision, following cæsarean section, has a potential danger, quite beyond the control of our profession, and therefore no operator is the guardian of the uterine scar incident to cæsarean section.

The earnest student of the subject would say, "Well, what are you going to do about it?". The answer is clear-cut; make uterine incisions fewer by ninety percent in order to terminate pregnancy. Let the obstetrician remain an obstetrician and not an abdominal surgeon.

Early in my experience, in conducting the obstetrical and gynecgological departments of the old Philadelphia Dispensary, I sent to the Joseph Price Hospital fifty-five patients, upon whom I felt cæsarean operations should be performed. I was directed, in no uncertain terms by my old master, the late Joseph Price, to scrub my hands and deliver these patients, which I did; there was one cæsarean section performed.

Nothing is more unfortunate than the ease with which a cæsarean section can be performed; it is the easiest operation in abdominal surgery. If it were as difficult as the cleaning out of the frozen pelvis, we would have fewer ruptured uteri. We do not know the percentage of ruptured uteri which follow cæsarean sections. It has been variously estimated from one to four percent. This is not accurate, as it must be remembered that only a small percentage of patients, who have had cæsarean sections performed, are allowed to have subsequent labors and, in this sense, the percentage of ruptured uterine incisions is kept down. Again, many patients are sterilized at the time of the first cæsarean section, which also reduces the percentage of ruptured incisions, so the real potential danger of the uterine incision incident to cæsarean section is not made evident by a proper statistical review.

If conditions were justifiable, we would be more willing to perform a cæsarean operation on a patient who was to be sterilized; with due consideration, of course, for the feeling of the patient as to creed and social conditions.

I doubt very much whether we should use the term "scar" in reference to the uterine incision incident to cæsarean section. The uterine muscle is composed of involuntary muscular fibers and an incision into such muscular structure, if not infected and overtraumatized, heals by the union of muscle fibers and not by the intervention of fibrous tissue, which is referred to as the uterine scar. Indeed, it is quite difficult, or at least should be, in a subsequent section even to see or define the earlier uterine incision following cæsarean section.

During the past twenty-five years we have used a high abdominal incision in all of our cæsarean operations and at this writing I cannot recall an adhesion to the uterine incision from a former cæsarean section. The fact that an incision in the uterine structure heals by intervention of muscle fibers and not by fibrous tissue, that is seen in the surgery on voluntary muscle, is an appeal to the operator for gentleness, cleanliness and the avoidance of introducing foreign material, such as buried sutures in the uterine incision.

Through and Through Suture

It is our opinion that the method of closing the uterine incision has much to do with subsequent rupture. For over sixty-five years the late Joseph Price and I have used the mass or through and through suture of silk to close the uterine incision in all of our cæsarean sections. By mass sutures we mean a through and through suture of the entire uterine wall; Lembert's sutures are inserted about a centimeter apart, the tissue included in the suture grasp is V-shaped; that is, twice as much tissue is included on the serous surface of the uterus as that of the mucous membrane side, so when the suture is tied, a greater pressure is made on the external surface of the organ.

We have never had a rupture of the uterine incision following our own work. The smallest size silk suture, consistent with sufficient strength, should be used. Early in our surgery we used No. 3 silk, later No. 2 and now No. 1. We have had but one postoperative complication following the use of silk. This was in a badly infected patient, who, following a cæsarean section, had a small amount of bloody discharge from the abdominal incision at the time of her menstrual period.

It should be kept in mind that the mass or through and through suture is not an interincisional foreign body and has not the trauma incident to the buried suture; and further, the buried sutures are ligatures and always a source of crushed and traumatized tissue.

We add this additional word in regard to the through and through suture used in all our abdominal work.

In the entire history of the Joseph Price Hospital, there has never been an incisional eventration. The through and through suture as used in the uterus following cæsarean section is an easy technical step. However, a through and through suture, as applied to the abdominal incision, is difficult in due proportion to the thickness, rigidity and shortness of the incision; properly applied, the through and through suture has no superior, if any equal. In the long incisions, there is no difficulty in inserting the through and through suture.

If the student is interested in the application of the through and through suture, as applied to abdominal surgery, he will find it fully illustrated in our monograph entitled, *Practical Surgery of the Abdominal and Pelvic Regions;* also in *Amer. Jour. Surg.*, Sept. 1934. The sterling properties of the through and through or mass suture are that its insertion prevents dead spaces in the incisions; it also prevents bleeding, or rather oozing into the incision and thus the formation of a blood clot which predisposes to infection and slow healing; but more than all, it is a drainage suture. Many incisions may be closed by the through and through or mass suture that would have to be drained if the terraced method of suture is used. This is an important factor in closing the infected walls of the uterus following cæsarean section if it has to be performed on an infected patient.

The student should keep in mind that, when a suture comes in contact with the skin, mucous membrane or peritoneum, it is drained by that structure and prevents the formation of a central or deep abscess in the tissue included in the bite or circle of the through and through or mass suture.

One cannot have an exploded incision (formation of deep abscess) following the through and through suture on account of the drainage function of the mass suture.

In no sense are we in any way condemning cæsarean section as an operation *per se;* it is one of the great blessings to both mother and child, when executed as an emergency procedure. We have never had a death from an elective cæsarean section. We trust we have not permitted this nil mortality to influence us toward a time-saving procedure, where the lives of both mother and child are at stake.

We question the right of the surgical specialist, who has had no experience in obstetrics, to pass upon the necessity for a cæsarean section. Nor can we permit inexperience in obstetrics to be an excuse for the unnecessary uterine incisions and the potential dangers which such incisions imply.

We have attempted to call attention to the fact that the uterus often ruptures before actual labor. In a great percentage of cases, no premonitory symptoms are present, other than those incident to the actual rupture of the uterine wall, such as occur in almost any type of intraabdominal calamity.

It is not our intention to discuss symptoms, pathology and treatment of the ruptured uterus; this may be found in nearly all text books on obstetrics. We want to say to the physician who incises the uterine wall for the delivery of a child, that he has made an incision in the uterus which is a potential danger of death to mother and child in each subsequent pregnancy and it is with this responsibility that he must carry on.

Furthermore, the potential dangers of the ruptured uterine incision cannot be estimated in any due relation to further labors, but such rupture may take place as early or even earlier than the seventh month with little or no premonitory warning.

Here lies the real tragedy of any unnecessary incision into the pregnant uterus which may bear fruit again.

241 NORTH EIGHTEENTH STREET.

DIETETICS IN DISEASES OF THE STOMACH*

MAX EINHORN, M.D.

New York, N.Y.

Organic Gastric Disease (*Continued from page* 413)

At the stricture of the cardia a methodical dilatation without bougies may sometimes also suffice. The pyloroplastic (of Heincke-Mikulicz) and the cardiotomy or cardio-fissure (Abbe) belong to the most beautiful and blessed operations which have ever been practised. After the operation the patients are enabled to eat everything, and to live without any trouble whatever, i.e., they are perfectly cured. Before operation, or if such is not feasible, one will administer light, slightly irritating nourishment, and always endeavor to make the patient partake of a larger quantity of food. If there is obstinate and constant vomiting, it is necessary to employ nutritive enemata. Group (c), achylia gastrica, will be advantageously discussed in regard to diet under Class 2.

Functional Disturbances

The second class of functional disturbances includes the largest number of all dyspeptics. Here stands uppermost chronic gastric catarrh, atony of the stomach, dilatation of the stomach, gastroptosis, superacidity, with or without hypersecretion, nervous gastralgia, nervous dyspepsia, and as an intermediary between the first and second class, achylia gastrica.

It appears advisable to discuss first the whole class, and thereafter to give special rules for the different groups. Liquid food or partly predigested substances (as all peptone preparations) are not in place here. By making the stomach work too little, the weakened condition of this organ is retained and in time aggravated. We must always bear in mind the principle of strengthening the organ by means of appropriate work.

Delafield (9) is said to express himself in his lectures in the following way regarding the dietetics of the dyspeptic: When a dyspeptic patient asks you the ques-

*Read before the Medical Society of the County of New York, May 22, 1893, and reprinted from the MEDICAL RECORD, June 24, 1893. Second article in the series.

tion, "What shall I eat?" reply, "Eat what you like". If he asks, "How much shall I eat?" say to him, "Eat as much as your appetite demands". If he still asks, "When shall I eat?" answer, "Eat when you are hungry".

Although I do not favor strict and severe dietetic rules, nevertheless I deem the above mentioned remarks as going too far. Unlike the normal healthy condition, in which instinct shows us the right measure to eat, neither too little nor too much, stomach patients often have lost the feeling of self-regulation, and as a rule partake of too small quantities of food. (Only in a few cases of boulimia there may be an increased desire for food, and in connection with it the quantity of food taken may sometimes be too large.) It is therefore necessary to instruct the patients to eat more, or to give them exact figures of the quantity of food required. As this varies with each individual it is most practicable to let the patient weigh himself once a week and to see whether he keeps his weight. If the patient does not lose any it is the best sign that he takes sufficient nourishment. Besides, we must remind patients to lead a regular life, to eat slowly (how many, especially in our country, sin against this natural law), and to chew well and triturate the food. One must avoid either extremely cold or extremely hot food. Too copious and too complicated meals must be forbidden.

I have made it a rule not to forbid anything, except what is, according to my conviction, obnoxious in the given case. In this way the patients have a great variety in their food and run less risk of subnutrition. Likewise we need not change the number of meals nor the hours appointed unless there should be special indications for such a proceeding.

Among the laity, as well as often among medical men, there are prejudices against certain forms of food. Thus, for instances, until recently one forbade all kinds of fat, even butter, in all dyspeptic conditions. Fat, however, belongs to the group of foodstuffs which has the largest number of heat units, and besides, is not bulky as a nourishment (butter). Undecomposed fat passes the stomach without disturbing it, and is digested in the small intestines. There is, therefore, no reason for forbidding butter, which should, on the contrary, be highly recommended. Fearing fermentative processes the partaking of bread and other foods rich in carbohydrates is often greatly limited, or even totally forbidden. Although it is true that the carbohydrates easily undergo fermentative processes, those cases in which considerable fermentations exist in the stomach are quite rare, and as a rule are found only where there is considerable stagnation of food in the stomach. In these cases, to be certain, a diet consisting principally of animal albumin (meat) for a short period is useful. By means of lavage of the stomach and other appropriate treatment one soon succeeds in checking the fermentative processes, and one can then administer carbohydrates.

An adult, according to Koenig (10), daily consumes one-third to three-fourths kilo of bread; fifty to sixty percent of the total food substances, and fifty to seventy-five percent of the carbohydrates are taken in the form of bread. This clearly shows the important part bread plays in diet. Its use is, therefore, as a rule advisable. It is ordinarily said that crust of bread, stale bread, and zwieback are easier to digest, on account of the starch contained in them being largely converted into dextrose. Although I am of the opinion that too fresh bread must be avoided, nevertheless, I rarely find much difference in the digestibility of the crust or other parts of well baked fine white bread, judging from experience gained from my own patients.

Articles of luxury (wine, beer, coffee, tea) are, as a rule, permissible. It is, however, necessary to give them in small amounts and in appropriate form. Strong liquors must be avoided, likewise all strong spices.

Appetizers, as a small amount of caviar, sardellen, or anchovies, on a small slice of bread or cracker, taken one quarter of an hour before the meal, are not only allowed but frequently directly commendable.

In reference to the special rules for the different diseases of the second class, we shall have at times to reduce the quantity of meat taken in all conditions accompanied by a diminished secretion of hydrochloric acid (gastritis chronica glandularis, atony plus subacidity); on the other hand, the quantity of richly carbohdyrate vegetable food will be increased. Kumyss, matzoon, milk with cognac (seven to ten cc. of cognac to 200 or 250 cc. of milk) may be taken with crackers either during or between meals.

In all conditions with superacidity the quantity of albuminous food should be increased; here one may give a great deal of meat (venison included). In superacidity with hypersecretion frequent and small meals containing consistent food are most appropriate. If there is a feeling of hunger between meals, the white part of hard boiled eggs may be taken (as is well known, albumin combines with acid and makes it, so to say, inert). The quantity of beverages must be greatly limited; most suitable in this instance are small quantities of vichy water. In dilatation of the stomach and in gastroptosis it is also advisable to give small and frequent meals, and to restrict the quantity of liquids taken. As a rule, milk and beer do not agree well in these cases. Small quantities of wine or imported dark beer or porter may be allowed.

In nervous dyspepsia and gastralgia our main object will be to increase systematically the quantity of food, here milk and its derivatives (kumyss, matzoon, bonny-clabber, buttermilk, cream) taken between meals play a great part (Weir-Mitchell treatment).

In achylia gastrica it is of utmost importance to give liquid or well triturated (pulverized) food. For here the chemical action of the stomach has entirely ceased, and vegetable food (on account of the albuminous membrane enclosing the starch granules), as well as animal food, passes from the stomach unchanged, without being converted into small particles, into the intestines and irritates them, unless there has long been formed a sufficient adaptation for these conditions. Vegetable food, on account of its containing chiefly carbohydrates, will be predominant in the diet of this affection. Thus achylia gastrica, in reference to diet, stands midway between the first and second classes. It approximates the first class in so far as it necessitates a liquid or a mechanically minutely triturated or pulverized food; and the second class, in allowing a richly carbohydrate diet.

Some readers may miss the presentation of exact bills of fare for chronic affections of the stomach. They have been omitted, because it is always necessary to individualize, especially in diet. We must be guided more

by the patients than by theoretical conclusions. Our main object must be to secure a sufficient nutrition. Only the above-given principal rules on diet must be observed, and at times even they have to be modified. In reference to this point Hippocrates (11) said: "Dandum aliquid tempori, regioni, aetati et consuetudini."

At present, with our more exact knowledge, we have come to appreciate this conclusion to a still greater degree.

References

1. Von Noorden: *Berliner Klinik*, Heft. 55.
2. Einhorn, Max: Medical Record 1892.
3. Munk and Ufflemann: *Die Ernahrung des gesunden und kranken Menschen.* Wien, 1887.
4. Koenig: *Die Menschlichen Nahrungs- und Genussmittel.* Berlin, 1883, p. 53.
5. Von Noorden: *Berliner Klinik*, Heft. 55.
6. Vierordt, K.: *Grundriss der Physiologie des Menschen*, 1887, 3. Auflage, pp. 288, 289.
7. Hirschfield, F.: *Berliner klin. Wchnschr.*, 1893, No. 14.
8. *Anatomie Pathol.* 1829-35.
9. Cited from Kellogg: *Methods of Precision in Disorders of Digestion*, 1893, p. 4.
10. Koenig: *Die Menschlichen Nahrungs- und Genussmittel.* Berlin, 1883, p. 430.
11. Cited from Munk and Ufflemann, l. c., p. 430.

20 East Sixty-third Street

A Cure for Dandruff and Falling Hair*

JOHN C. ROMMEL, M.D.
Philadelphia, Pa.

Dandruff, a product of seborrhea, begins insidiously. Many times it is started by the stuff put on the head by the barber. The more the barber puts on, the more dandruff is formed. The public falls for the barber's talk, and the hair falls for the barber's stuff.

I have been experimenting for many years to find a cure. Sulphur in some form seems to be the best remedy. When the sulfa drugs came out eight or ten years ago I began using them and can report some beneficial results. I began with sulfanilamide. Although this drug is only slightly soluble in water, it can be used successfully. I put twenty-five or thirty tablets (five grains each) of sulfanilamide in a gallon of water and let it stand for about three weeks. This is what I have been using. It does not work so well in old cases, but it does wonders in young persons and in recent cases.

It should be used freely once or twice a day, rubbing it well into the scalp. It dissolves the dandruff. In young persons it has proved successful in curing the dandruff and has stopped falling hair.

Illustrative Cases

Case I.—A boy, about sixteen years of age, had falling hair to such an extent that he became frantic because of imminent baldness. His parents took him to a newspaper advertiser, who wanted one hundred dollars for his treatment. The family was poor and could not afford that price; so they went home without anything. When the mother told me about it I gave her a six-ounce bottle of the sulfanilamide solution. I also gave her six or eight tablets of the drug. As the boy used the liquid from the bottle he added a tablet or two, with sufficient water to dissolve the tablets. In a couple of months the scalp condition was cured; the hair stopped falling out. The boy was overjoyed. He is now in the navy.

Case II.—A young lady, employed at a hairdresser's establishment, came to me and said she had dandruff and falling hair. She was given the same treatment as the boy, mentioned in Case I, and was cured. She later asked me for some of the solution for another person in the same place. I gave her a bottle of it. She told me later that the girl was cured. I asked her if the head of the establishment would not want some for customers. "No," she replied, "she doesn't want to cure them, that would reduce our work. She wants to keep the customers coming in regularly."

The commercial viewpoint is quite different from the medical.

Case III.—A man mentioned to me that his hair was falling out. He did not have any perceptible dandruff. I gave him a bottle of the sulfanilamide solution. I did not expect it to help, but to my surprise, his hair stopped falling out. He was cured.

I have treated dozens of other cases similar to these. The following solution was made up for me:

Sulfanilamide	60 grains
Fluidextract of thyme	6 drams
Glycerin	6 drams
Bay rum	8 ounces
Water	ad. 16 ounces

The sulfanilamide is dissolved in boiling water. This makes a very nice solution. The dandruff is dissolved by the sulfanilamide. The oily secretion of the scalp is promoted by the bay rum.

The plain sulfanilamide solution seems to work well. I prefer it to the mixtures. Sodium sulfathiazole, when used in a three to five percent solution, makes a nice wave-setting solution. It will keep the hair in place.

I am using some other things, but have no results to report. After the present crop of bald heads disappears there need be no more baldness.

4601 North Broad Street

*Read before the combined meeting of the Northern Medical Association, the North End Medical Society and the North Branch of the Philadelphia Medical Society, which was held in the Jewish Hospital, on Thursday, April 19, 1945.

1945 Supplement to the U.S. Dispensatory

A review of the nonofficial new medicinals in the 1945 supplement to the twenty-third edition of the U.S. Dispensatory was presented by Louis M. Roeg, of Merck & Co., Inc., at the June meeting of the Proprietary Association of America. He points out that, although somewhat overshadowed by the spectacular publicity given to penicillin and DDT, there are a number of other important discoveries, such as the aerosol antiseptics (for disinfecting air), biotin (a growth factor) oxidized cellulose (absorbable in body tissues), sodium propionate (for athlete's foot and other fungi), and some new sulfa compounds (which may prove useful in the treatment of tuberculosis).

According to Mr. Roeg, never in the history of medicine have the advances been so great in such a brief span of time. Centuries of patient plodding in research laboratories all over the world have suddenly culminated in discoveries opening whole new fields of healing. The high percentage of today's battle-wounded who recover is due in no small measure to the products listed in this supplement, he said.

Symposium on Internal Medicine

DIAGNOSIS AND TREATMENT OF GOUT

E. NEUWIRTH, M.D.
New York, N.Y.

In the United States gout is more common than is generally supposed; it constitutes at least five percent of all patients afflicted with chronic joint disorders (1). This figure would indicate that in our country probably three hundred fifty thousand people suffer from gout. Hence, it is most unfortunate that gout remains unrecognized for many years. In forty cases reported from the Mayo clinic the average duration of the disease was fifteen years at the time of recognition (1). On the other hand, many nongouty joint diseases are mislabelled gout.

One of the reasons why gout is overlooked is that its possible presence is not constantly borne in mind. Another factor delaying the diagnosis of the disease is that physicians insist on the presence of podagra, the acute inflammatory involvement of the metatarsophalangeal joint of the large toe. Although podagra occurs in the majority of cases in the first attack of the disease, any joint of the body may be the site of the initial attack, and the large toe may be spared even in later seizures, which usually are polyarticular.

Diagnosis

In general, only the appearance of advanced tophaceous changes in the joints excites suspicion of gout. The diagnosis of advanced articular gout is not difficult. After recurrent attacks of acute arthritis with complete symptomatic remissions, the first stage of gout, intra-articular structural changes develop and chronic arthritis with permanent distortion of the joints follows. In this second stage of gout, the stage of chronic gouty arthritis, the blood urate concentration usually is increased, sodium urate crystals accumulate in the regions of the joints and, frequently, punched-out areas of osseous erosion may be revealed in the roentgenograms of the bones affected, especially in the ends of the phalanges of the feet and hands. However, the stage of chronic articular gout is reached about ten to twelve years after the first attack. If one were to wait for the appearance of these classic pathological changes to diagnose gout, much valuable time would be lost, during which appropriate treatment might prevent or at least retard the development of serious renal, cardiovascular and cerebrovascular complications. It is, therefore, of the greatest import to diagnose gout in the pretophaceous stage.

Sydenham (2) gives a colorful description of the attack of acute gouty arthritis. In this classical gem of medical literature, the sudden nocturnal onset of the acute attack in a large toe, heel or ankle, the excruciating pain, the heat and swelling of the involved part, its extreme tenderness and the *complete symptomatic recovery* following the arthritic episode are emphasized. The acute attack may last a few days to a week or more. After a symptomless interval of weeks, months or one or more years, the attack may recur in the same or in other joints. Hence, absence of typical attacks does not indicate that the gouty process is cured.

Recurrent attacks of acute arthritis appearing suddenly, developing swiftly and vanishing rapidly and completely, afford the most valuable clue to the diagnosis of pretophaceous or presumptive gout. Hench calls this articular pattern the "signature of gout." The prompt and striking response to the early administration of full therapeutic doses of colchicine is another important diagnostic criterion of gout. In addition, a high concentration of urate in the blood, a family history of gout and evidence of renal dysfunction, if present, contribute importantly to the correct diagnosis.

Acute polyarticular attacks of gout with a tendency to migration, especially when occurring in younger persons and accompanied by fever, leukocytosis and an increased sedimentation rate of the red blood cells, are often mistaken for rheumatic fever. The absence of heart disease, tachycardia and nosebleeds favors the diagnosis of gout. Peeling of the skin over affected joints following subsidence of inflammation is seen in gout and not in rheumatic fever. Many an acute gouty joint is incised because it is mistaken for acute cellulitis.

When confronted with a patient having his first attack of acute gouty arthritis, where the articular pattern so characteristic of gout is as yet absent, certain features of the individual attack must primarily be considered in order to reach a diagnosis. Not infrequently acute attacks of gout are provoked by major or minor trauma, operations, overuse of joints, inordinate drinking, overeating, particularly excess of purines, proteins and fats, exposure to cold and damp, hiking, hunting or fishing expeditions, excessive sexual indulgence, mental strain, emotional stress, treatment at a spa, ingestion or incorporation of certain drugs for the treatment of some coincident disease (e.g., mersalyl, ergotamine tartrate, liver extract, insulin, gold preparations and thiamine hydrochloride), purging, severe hemorrhage and transfusion. This should be borne in mind in obtaining the history of a person with acute arthritis. Renal colic and olecranal bursitis frequently precede acute gouty attacks. A diagnosis of gout should be entertained if, in addition, the history reveals that the attack occurred during the early spring or fall, appeared suddenly in the early morning hours and involved a distant joint. The spine, shoulders and hips are rarely affected. Bald, obese men of ruddy complexion and in the fourth or fifth decade of life are particularly prone to have gout (3). And, above all, one must bear in mind that acute attacks of gouty arthritis leave no joint symptoms and function is completely restored in the affected joint. A combination of these features is almost pathognomonic of gout.

The passage in the urine of a urate calculus may occasionally indicate the presence of gout even before the

first attack of acute articular distress. Sydenham (2) who suffered from both conditions aptly remarks that "gout breeds the stones in very many." Of course, not every person who passes urate stones has gout. Joint symptoms associated with renal colic, olecranal bursitis or Achilles tendinitis, should arouse suspicion of gout.

In 1848, Alfred Baring Garrod reported that the blood of gouty persons contains abnormal quantities of uric acid in the form of sodium urate and that this is due to the inability of the kidneys to excrete uric acid (4). Today, it is believed that defective renal function is the result rather than the cause of gout. The normal value for urate varies from two to four and a half mg. per one hundred cc. of whole blood. (Garrod demonstrated excess sodium urate in the blood by placing in a serum a thread to which sodium urate crystals would adhere.)

Some observers (5) contend that high values for blood or rather serum urate are practically always present in established gout. In the experience of others (3), however, the concentration of blood urate may be normal even in patients with tophaceous gout.

On the other hand, an elevated blood urate level can not be considered pathognomonic of gout, because it occurs in a variety of other diseases, such as leukemia, pernicious anemia, polycythemia, lead poisoning, renal insufficiency and acute infections, such as pneumonia.

Tophi

Tophi are the sole pathological proof of gout. They establish the gouty nature of an associated arthritis. Tophi are accumulations of sodium urate crystals in mesenchymal tissues. They develop most frequently in and about peripheral joints, in cartilage, in bone, in the capsule, in ligaments and tendons and in other supportive tissues, and also in cartilage unrelated to joints, as in the cartilages of the ear. One or more white nodules on the helix or lobe of the ear represent an authentic revelation of gout, provided they contain sodium urate crystals. Such crystals are often deposited in the interstitial tissue of the kidneys and also in the renal calices and pelves, forming gravel or calculi. In the joints the urate crystals invoke changes similar to those prevailing in rheumatoid arthritis and in osteoarthritis. Tophi are painless; they become painful during acute exacerbations or when they interfere with joint motion. They may become organized and calcified or they may ulcerate, permitting the stones to peep out like "crab's eyes." Under the microscope, the "chalky" material from a broken-down or needled tophus reveals needle-shaped sodium urate crystals. The chemical nature of the "chalk" may also be verified by the murexide test. The laboratory procedures are necessary to differentiate true tophi from nodular swellings of another nature.

Palpable or visible tophi appear in about fifty percent of all cases of gout. Since they develop about eight to ten years after the clinical onset of the disease, one must not hesitate to diagnose presumptive gout in their absence if other evidence present justifies the diagnosis.

Sodium urate crystals may be deposited in bone and replace calcium salts, i.e., osseous tissue. In roentgenograms, the osseous tophi are revealed as punched-out areas at or near articular margins. Huber, in 1896, was the first to describe the roentgenographic features of gout, namely, sharply defined circular or oval areas of diminished density located in the distal ends of the phalanges of the feet and hands (6). Later, hypertrophic and destructive changes develop.

Roentgen evidence of osseous tophi is seldom discernible in the early years of gout; such evidence was absent even in patients who had had symptoms of the disease for twenty-five or thirty years (3). Hence, normal x ray findings do not rule out gout. Moreover, x ray evidence indicative of erosion of bone can also be obtained in various other diseases, a circumstance which further detracts from the value of roentgen examination in gout.

Treatment

As regards the treatment of gout, Anton von Störck contributed the most important therapeutic element by reintroducing, in 1763, Colchicum autumnale or meadow saffron (7). Prior to that time, this perennial plant was in ill repute because it was believed to be poisonous. Von Störck, however, demonstrated that small amounts of the plant could be ingested with impunity. Colchicun was known to Byzantine physicians under the name of hermodactyl. The famous Alexander of Tralles (8) has preserved for posterity a prescription of Jacobus Psychrestus who fifteen hundred years ago practiced medicine in the city of Constantinople and who often prescribed colchicum.

As yet physicians are unable to explain the speedy and remarkable effect of colchicum in the acute gouty attack; it does not increase urate excretion nor decrease the urate content of the blood. Colchicine, the alkaloid and active principle of Colchicum autumnale, is the substance preferred for the treatment of gout because its potency is constant, in contrast to that of the wine and the tincture of colchicum, which deteriorates on standing. The drug should be administered with caution to the old and feeble.

Many physicians begin the treatment of an acute attack of gout with a saline purgative. The treatment is continued with the ingestion of two colchicine pills, one-half milligram each, followed hourly or every two hours by one pill. It is not necessary to produce nausea or purgation to obtain full therapeutic benefit with colchicine; if diarrhea appears, the drug should be stopped at once. In case a purgative was taken initially, it is difficult to decide whether the resulting purgation is due to the purgative or to colchicine. For this reason many physicians omit the purgative.

The ingestion of inadequate amounts of colchicine is frequently responsible for therapeutic failure. Should the acute attack fail to respond to the administration of the drug, another course of it may be given after the lapse of a few days. Patients who are warned by prodromes of an impending attack may prevent or abort it by promptly taking a few colchicine tablets.

In addition, the patients should be put to bed, eat suitable food and drink abundant quantities of water, fruit juices and milk, in order to combat dehydration and to prevent precipitation of urates in the kidneys. Hot moist compresses or cold ones may be applied to the joints, though they do not seem to shorten the duration of the acute attack.

Although colchicine is believed to be highly effective only in the acute gouty attack, its prophylactic use in the asymptomatic periods between attacks is also advocated. One colchicine pill after meals for one week every

four weeks, or for two or three days each week, has been recommended.

In 1908, Nicolaier and Dohrn (9) reported that cinchophen (or atophan) increased the urinary output of urate while lowering its level in the blood. In the treatment of gout, it was found that significant relief followed the use of cinchophen in acute attacks. The mechanism of this action has not yet been clarified. It is as yet not known whether the therapeutic effect of cinchophen in gout is solely due to its uric acid eliminating capacity. In addition, cinchophen possesses antipyretic and analgesic properties. Under no circumstances should cinchophen be given uninterruptedly; there should be an intermission of four to five days between courses. After two to four days, administration of the drug may be repeated. To prevent the precipitation of urates as gravel or stones, because of the acid reaction of the urine, the ingestion of cinchophen should be followed by ingestion of alkaline waters or powders, such as sodium bicarbonate in teaspoonful doses two or three times daily. Urates are more soluble in urine rendered alkaline. A liberal intake of fluids and carbohydrates should also be insisted upon during the administration of cinchophen. The intermittent use of this drug is advocated between acute attacks in order to reduce their frequency, severity and duration. It may be given in doses of fifteen grains (one gram) twice a day, one day each week (11).

It must be kept in mind that cinchophen and its derivatives, such as neocinchophen, do not cure gout and are known to cause severe and even fatal liver poisoning. Signs of intoxication may first appear long after the administration of the drug has been suspended. Because of its toxicity and because there is no safe way of administration (10), many physicians do not use cinchophen at all.

Recently a new approach to the understanding and treatment of gout has been proffered. The clinical association of blood dyscrasias and gout prompted John S. Davis to inject campolon, a full complement liver extract, in cases of chronic gouty arthritis and tophaceous gout (12). Davis reports that the therapeutic results were most gratifying.

The most important element in the treatment of gout is the treatment of the patient as a whole between acute attacks. This is the socalled interval treatment. The prophylactic use of colchicine and cinchophen in the intercritical symptomless periods has already been indicated. As a substitute for cinchophen, sodium salicylate may be used three or four days each week in doses of eighty grains daily. Sodium salicylate increases urate excretion, lowers the level of blood urate, and controls pain.

The objective of the interval treatment is to prevent or at least postpone the development of chronic gouty arthritis and of complications, such as gouty nephritis, cardiovascular and cerebrovascular damage. Since hyperuricemia is regarded as the chief trouble maker, its control is attempted, not only by the use of the drugs just mentioned, but also by dietary restrictions.

Physicians in different countries and even in the same country differ widely as to the dietary restrictions required in symptomless chronic gout. Foods recommended by some physicians are rejected by others. At one time carbohydrates were cautioned against and diets high in fats were praised. Today a high carbohydrate diet is favored and fat is disapproved of. It is claimed that high fat intake increases the urate concentration of the blood and might percipitate attacks of gouty arthritis (12a). In general, a diet high in carbohydrate and low in purine, protein and fat is recommended. But keen students of the disease contend that low purine, protein and fat intake does not prevent acute attacks and that diets high in fat, purine and protein seldom induce them. Personally, I encourage the adoption of a diet containing carbohydrates, protein, fat, vitamins and minerals in adequate amounts and quality. Only high purine foods are prohibited, such as thymus, liver, kidney, brains, pancreas, sardines, green peas and mushrooms. Foods and drinks to which the gouty patient is hypersensitive must also be eliminated from his diet. (In addition, both nonalimentary allergens and physical agents capable of producing manifest reactions in the sensitive gouty patient should also be avoided.) The aim must be that the patient should not lose ground through a restricted diet based upon food prejudices and unconfirmed clinical data.

A liberal fluid intake is also insisted upon. As to alcoholic beverages, nobody seems to know which alcoholic drink is offending or harmless for the gouty patient. Often the treating physician will claim that the alcoholic beverages produced in his country are harmless. I myself permit limited amounts of alcohol to patients accustomed to drinking.

If in spite of adequate treatment in the first stage of gout chronic deforming arthritis develops, which usually is the case, the cautious use of heat, massage and exercise is recommended. These forms of physical medicine in conjunction with dietary restrictions and high fluid intake form the backbone of treatment as practiced at spas which are visited by gouty patients.

Conclusion

From the data enumerated one point becomes clear, namely, that gout is still "the physician's shame (13)." In fact, there is no adequate explanation, no clear understanding of a number of vexing problems. No one as yet knows the cause of hyperuricemia present in persons with gout; no one knows the cause of retention of urate by the body tissues and fluids or the cause of the precipitation of sodium urate into the tissues.

At one time it was believed that gout was the only cure for gout. The objective was to induce acute attacks of gout to cure the disease (14). But gout does not erase gout. On the other hand, it seems that the therapeutic measures suggested can to a certain extent alter the clinical course of the disease and retard its progress. However, it appears that despite the institution of the best therapeutic measures, once gout has secured a foothold in a person "the disease sticks to him until death (15)."

References

1. Hench, P. S.: A clinic of some diseases of joints, *Med. Clin. N. Amer.* 19:551-583 (Sept.) 1935; Comments on the diagnosis and management of gout in certain parts of the United States, *Proc. Staff. Meet., Mayo Clin.* 12:262-269 (April) 1937; Diagnosis and treatment of gout and gouty arthritis, *J.A.M.A.* 116: 453-459 (Feb. 8) 1941.
2. Sydenham, T.: *The Whole Works of That Excellent Practical Physician,* Dr. Thomas Sydenham, translated from the Latin by John Pechey, London, R. Wellington & E. Castle, 1696.

3. KINELL, J., and HADEN, R. L.: Gout: a review of sixty-two cases, *Med. Clin. N. Amer.* 24:429-441 (March) 1940.
4. GARROD, A. B.: Observations on certain pathological conditions of the blood and urine in gout, rheumatism and Bright's disease, *Med.-Chir. Tr.*, London, 31:83-97, 1848; *The Nature and Treatment of Gout and Rheumatic Gout*, London, Watson & Maberly, 1859.
5. JACOBSON, B. M.: The uric acid in the serum of the gouty and of nongouty individuals: its determination by Folin's recent method and its significance in the diagnosis of gout, *Ann. Int. Med.* 11:1277-1295 (Jan.) 1938.
6. HUBER: Zur Verwerthung der Röntgen-Strahlen im Gebiete der Medicin, *Deutsche med. Wchnschr.* 22: 182-184 (March 19) 1896.
7. STÖRCK, A.: *An Essay on the Use and Effects of the Root of the Colchicum Autumnale, or Meadow Saffron*, translated from the Latin, London, T. Becket, & P. A. De Hondt, 1764.
8. ALEXANDER (TRALLIANUS): *Medici Libri duodecim, Graeci et Latini*. Basel, per Henricum Petrum, 1556.
9. NICOLAIER, A., und DOHRN, M.: Ueber Wirkung von Chinolincarbonsäuren und ihrer Derivate auf die Ausscheidung von Harnsäure, *Deutsch. Arch. f. klin. Med.* 93:331-335 (June) 1908.
10. PALMER, W. L., and WOODALL, P. S.: Cinchophen—is there a safe method of administration? *J.A.M.A.* 107: 760-764 (Sept. 5) 1936.
11. GRAHAM, G.: Gout: in F. W. Price's *Textbook of the Practice of Medicine*, ed. 5, London, Oxford University Press, 1937.
12. DAVIS, J. S.: The liver an etiological and therapeutic factor in certain types of blood disease and in gout and gouty arthritis, *J.A.M.A.* 117:1648-1649 (Nov.) 1941.
12a. LOCKIE, L. M., and HUBBARD, R. S.: Gout: changes in symptoms and purine metabolism produced by high fat diets in four gouty patients, *J.A.M.A.* 104:2072-2075 (June 8) 1935.
13. SENNERT, D.: *Opera, Lugduni, Io. Antonius Huguetau and Marius Antonius Ravaud*, 1666, book 4.
14. BOERHAAVE, H.: *Aphorisms Concerning the Knowledge and Cure of Diseases*, translated from the Latin edition by J. Delacoste, London, Innys & Hitch, 1742.
15. ARETAEUS (CAPPADOX): *The Extant Works*, edited and translated by Francis Adams, London, The Sydenham Society, 1856.

123 EAST EIGHTY-FOURTH STREET

CARDIAC ANEURYSM

*Report of a Clinical Case**

J. L. DIAMOND, M.D.
Fargo, North Dakota

According to Sternberg (3), approximately eighty-five percent of aneurysms of the heart are produced by coronary artery disease. Like coronary thrombosis, these occur more commonly in males. The age incidence is the same as in coronary artery disease. Aneurysm of the right auricle was described in 1676 (5), of the right ventricle in 1696 (5), and of the left ventricle in 1757 (5). Usually, the aneurysm is single but two or more may be present. There are three types of aneurysms: 1, at the right sinus of Valsalva, which usually perforates into the right ventricle; 2, intravalvular, in the sinus of Valsalva, and 3, a partial cardiac aneurysm, generally due to coronary sclerosis (5). In a few cases they have arisen from gummata (2), ulcerative endocarditis, trauma, abscess or cyst in the myocardium.

Four stages in the development of the chronic partial cardiac aneurysm are recognized: 1, attacks of pain of short duration; 2, localized pericarditis at the site of infarction; 3, stage of latency or apparent cure which may last from several weeks to several years, and 4, stage of advanced myocardial disease associated with rupture or decompensation. Cardiac aneurysm occurs in at least nine percent of all cases of coronary thrombosis, but only one half of one percent of ventricular aneurysms have been diagnosed during life (1).

Pathology

Pathologically, a cardiac aneurysm is the fibrous transformation of the myocardium following coronary thrombosis. Most commonly, the site of the aneurysm is at the apex of the left ventricle or in the anterior wall immediately above the apex. This predilection is explained by the fact that it is the part furthest removed from the blood supply and is the thinnest portion of the left ventricle. Most early cardiac aneurysms are found in this region. The older aneurysms involve the ventricular wall. The size is variable and depends upon the age of the aneurysm.

An explanation for the formation of the aneurysm is as follows: There occurs a slow obstruction of a coronary artery by atherosclerosis, which may be completed by thrombosis. Such an obstruction causes a gradual destruction of the cardiac muscle, and it is replaced by fibrous tissue. In the scarred area the heart wall becomes thinner, tends to stretch, and, as it heals, a saccular dilatation is formed. If the scar is strong enough to resist intracardiac pressure, no bulging beyond the epicardial line occurs and it is called a partial cardiac aneurysm. If the cardiac wall yields to intracardiac pressure, the bulging occurs beyond the line of the epicardium and a chronic cardiac aneurysm is formed. The aneurysm of the left ventricle, the commonest location, weakens the cardiac wall, but resistance may be increased by thickening of the epicardium, adhesions joining the pericardial surfaces, or thrombus formation occurring within the sac. The presence of this bulge, as the wall gives, can be recognized by x ray and it is called a chronic cardiac aneurysm (5). It is not known how long it takes for such an aneurysm to form. In one case, after an anterior coronary occlusion, an aneurysm developed three months later (3).

Clinical Features

The clinical findings are not constant. Certain features, however, are significant. These include, 1, history of coronary thrombosis; 2, cardiac enlargement; 3, weak first heart sounds, and 4, a diffuse heaving precordial impulse (1, 3). Berk (1) states that some reports have described a disproportion between the force of the apex beat and intensity of the heart sounds, an expansile pulsation between the apex and sternum, and localized precordial tenderness with fixation of the apex.

*Published with the permission of the Medical Director of the Veterans Administration, who assumes no responsibility for the opinions expressed or the conclusions drawn by the author.

In many reported cases of cardiac aneurysm, there was a history of several attacks of anginoid pain of long duration. A presystolic rhythm, occasional precordial friction rub, a heaving impulse between the left fourth and sixth space with a systolic retraction in the fifth space, a wide expansile diffuse pulsation extending medially and cranially have been described (3, 6). This diffuse thrust that extends medially may be associated with a gallop rhythm. A dull first sound suggests an aneurysm, rather than a generalized ventricular enlargement, in which case the transmission of the impulse that may be present is directed laterally and downward. Dressler and Peiffer (6) stated that precordial pulsation is the most frequent sign of cardiac aneurysm. The precordial pulsation depends upon the force and extent of the pulsation, the size of the aneurysm, amount of thrombotic material lining the aneurysmal wall, the extent of lung tissue between the cardiac and thoracic walls and lastly on the thickness of the tissues.

Diagnosis

With the advent of the x ray, the diagnosis of a cardiac aneurysm during life has become more frequent and less difficult. Two types of cardiac aneurysms occur: 1, the diffuse, eccentric dilatation of the cardiac apex, which is more common, and 2, the circumscribed bulge which has an oval or angular shape. Constancy of radiological findings is necessary. The x ray should be made in anterioposterior and oblique positions. It is necessary to follow up with fluoroscopic examination.

Typically, there is a circumscribed bulge at the level of the middle or upper portion of the left cardiac contour and an abrupt change in the course of the left cardiac margin, generally seen near the base. Fluoroscopy shows a systolic lateral pulsation that proves the existence of an aneurysm at this level (6). If the bulging is well marked an incisura is formed between it and the lower or normal portion of the ventricle. A pulsatory phenomenon has been described during fluoroscopy in which, as the ventricular wall dilates, the weakened aneurysmal wall dilates, so that during ventricular systole, the aneurysm shows expansion (5). This phenomenon is present before thrombus formation or calcification occurs. Fluoroscopic findings of contraction of a bulging area asynchronous with the remainder of the ventricle are confirmatory evidence of aneurysm.

The fluoroscopic examination also points out the direction of an aneurysmal bulge. This can be determined by a thick barium meal in the esophagus observed under the fluoroscope. When the mass bulges posteriorly it encroaches upon the esophagus directly, or it may press indirectly upon the esophagus when the anterior part of the left ventricle presses against the anterior chest to cause the posterior part of the heart to move further backward (4). Babey (4) states that the cardiac aneurysm produces this effect directly due to a posterior infarction, or indirectly due to an anterior infarction. If an aneurysmal area is filled with organized clot, an area of increased density occurs. Calcification appears much later (3). Since most cardiac aneurysms occur in the apical area, they are more readily recognized when situated in the basal or middle portion of the left ventricle (6). Interpretation of the x ray alone does not always demonstrate the diagnosis of aneurysm, since the bulge must occur along the surface of the heart to be discernible.

The electrocardiogram does not offer specific help in the diagnosis of a cardiac aneurysm. The tracings indicate coronary occlusion early, or coronary thrombosis soon after its occurrence. In apical aneurysms, the QRS complexes tend to be directed downward in the second and third leads. On the whole, in all cases of cardiac aneurysm, the electrocardiogram shows signs of coronary infarction and usually evidence of an anterolateral location (the commonest site of cardiac aneurysm is the left ventricle), deep S deflection usually in leads 2 and 3, even without evidence of left-sided hypertrophy (6). Rowland (7) confirms that the rarity of an electrocardiographic tracing which shows right axis deviation in hypertensive or arterioslerotic heart disease and its relative frequency in coronary artery disease associated with cardiac aneurysm, makes this type of electrocardiographic tracing suggestive of cardiac aneurysm.

Despite the seriousness of the disease, the prognosis is better than ordinarily expected. Such a person apparently develops increased tolerance for activity and a greater capacity for physical effort. Satisfactory cardiac function in patients suffering from cardiac aneurysm has been reported (5, 6). Even if part of the muscular structure of the heart is impaired, the capacity of the balance of the heart to carry on is unusually good. While guarded, the prognosis is relatively favorable both as to life expectancy and for necessary effort. The causes of death following cardiac aneurysm are: effects of an embolism derived from a mural thrombus, a severe hemorrhage caused by rupture of the aneurysm, or cardiac failure (1).

The following case report illustrates that cardiac aneurysms can be diagnosed during life if the case history, clinical course, radiological and electrocardiographic findings are carefully correlated. It points out that although it is relatively rare in frequency, it is of academic concern to follow up these patients. It is also of interest to note that these cases have a more favorable outlook than heretofore attributed to them.

Case History

The patient, a man aged fifty-three years, an electrician by trade, was admitted to the hospital May 25, 1940. He gave a history of precordial pressure which occurred about two weeks before admission, and then disappeared shortly thereafter. On the day of admission he did some heavy physical work at home, then retired to bed, but was awakened twenty minutes later with severe substernal pain associated with profuse perspiration and weakness. As the pain persisted, he came to the hospital. He obtained considerable relief from narcotics but had a dull heavy feeling in the neck and shoulders. There was no history of dyspnea, edema or any precordial distress prior to the present attack.

Physical examination revealed a heavy, broad chested man who appeared restless with cyanosis of the lips. There were distant heart sounds, a normal cardiac rhythm with a weak pulse, the rate was 92 and the blood pressure 104/70. There was no apparent cardiac enlargement. The temperature was normal. Urinalysis was entirely negative. Blood count showed red blood cells 4,600,000; hemoglobin 92 percent; white blood cells 11,000, with 83 percent polymorphonuclears. The sedimentation index was 22 mm. (Cutler), and the Wassermann was negative. On this date x rays showed

no pulmonary consolidation or marked cardiac enlargement. The electrocardiogram taken on May 27, 1940, showed right axis deviation, inverted T-1, absent Q-4, and high take-off of the S-T interval in leads 2 and 3. On this date, the temperature became elevated. The patient had a low grade hyperpyrexia until June 19th, after which time the temperature remained normal.

On June 10th, the electrocardiogram showed no changes from the previous graph except for elevated S-T interval in lead 1 and a low S-T in lead 3. The sedimentation rate on June 13th was 21 mm. and on June 21, June 24, and July 5 was 24, with a reduction in the white blood cells on that date to 8,600 with 60 polymorphonuclear cells. On July 7th, the patient had another sharp attack of substernal pain and the following day it was noted that his pulse became irregular. The electrocardiogram on that date showed a decrease in voltage of every third QRS complex and the T-2 and T-3 waves were inverted. There was a slurring and notching of the QRS complexes. There was a conduction defect noted in every third complex. On July 18th, the electrocardiogram showed a deep T-2 and T-3, with a restoration of normal regularity in pulse and size of the QRS complexes. On August 7th, the electrocardiogram showed marked myocardial damage, low voltage in the QRS complex of the second lead. The right axis deviation persisted. The sedimentation index on July 22d was 25 and on August 7th it was 25 with a 12,000 white cell count. The patient was discharged from the hospital on August 9th.

A recheck on September 16, 1940, showed red blood cells 4,250,000; 82 percent hemoglobin, and white blood cells 5,850; sedimentation index was 15. The electrocardiogram showed elevation of T-1, negative T-3, and low take-off in lead 3, and negative QRS in lead 4, with diphasic lead 4. There was no evidence of notching or slurring in this graph. On this date, the x ray of the chest showed normal ribcage and normal pulmonary markings. The heart shadow appeared to be boot-shaped and rectangular. The heart measurements were: aortic arch 6.2 cm., thoracic diameter 32.2, heart width 17, and oblique width 18.3, and the heart channel occupied 53 percent. Close examination showed a semispheroid shadow which was lighter in density and appeared to bulge out in the region of the left ventricle toward the periphery. The denser heart shadow appeared to continue for about 1 cm. below the bulge described above. Fluoroscopic examination revealed a bulging, pulsating mass which seemed to be a part of the denser shadow representing the left ventricle. In an anterior oblique position this bulging mass appeared to be anteriolateral and had a distinct pulsation.

One month later, the electrocardiogram findings were essentially the same as those on previous dates, although the voltage of the QRS complex in lead 2 was somewhat higher. The urine analysis was essentially normal. The white blood count was 8,000, with sixty-seven percent polymorphonuclear cells and twenty-five percent lymphocytes. The x rays showed a slight increase in the heart size which seemed to take on a more rectangular bulge, somewhat obliterating the sharp angle caused by the more pronounced angular bulge of the previous x rays. The obliteration of the left cardiophrenic angle was believed due either to increase in size of the bulge, intramural thrombi, or pleuropericardial adhesions. Fluoroscopic examination, using a barium meal with the patient in the right anterior oblique position, showed no encroachment of this bulging mass posteriorly on the esophagus. The clinical findings were a slight diffuse precordial thrust, a weak first sound, no murmurs, normal cardiac rhythm, blood pressure 120/82, and regular pulse rate. The patient complained of occasional shortness of breath on exertion, and gaseous distension. The dyspnea was gradually disappearing, he felt stronger and could walk one to three miles a day without being unduly fatigued.

Follow-up biannual examinations were made. On May 15, 1942, physical findings were similar to those of October 1940. Urinalysis and blood counts were normal. The x rays showed the same boot-shaped heart which measured as follows: I.D. 33 cm, MR 5.6 cm, ML 12.4 cm, G.V. 6.5 cm, to indicate that the heart occupied fifty-four percent of the transverse diameter of the chest. The electrocardiographic tracing showed auricular and ventricular rates of 72, right axis deviation, P-R interval 16, QRS .06, P-waves all upright, QRS complexes slurred at apices with a negative phase lead 1, T waves inverted in leads 1 and 4 and ST interval elevated in lead 4. On May 17, 1944, there was noted some dyspnea with mild exertion but no evidence of decompensation. Urinalysis and blood counts were normal. The x rays showed no change in configuration and measured as follows: I.D. 33 cm, MR 6 cm, ML 12 cm, and G.V. 6.5 cm. The electrocardiographic tracing indicated cardiac rate of 64, sinus rhythmia, right axis deviation, P-R interval of .20, QRS .08, P-waves all upright, low, negative QRS complexes in lead 1 with notching, deeply negative T-1 with diphasic T, leads 2 and 3, S-T intervals low in lead 3, and elevated in lead 4 (CF-4), where the QRS complex was deeply negative.

Four years after the initial attack, he felt well. He led a quiet sedentary life for three years, limiting his physical activities to walks in gradually increasing lengths, taking care of a garden and performing minor chores about his house. For the past eighteen months, he has worked regular hours as a clerk in a grocery store but refrained from arduous labors. During this time, he had no acute cardiac attacks. At the end of the day, and when he exerts himself more than usual, he admits being tired. He has occasional dyspnea. However, standing still for a few minutes or resting at home for a short time relieves him.

The diagnoses established were left ventricular aneurysm and coronary thrombosis with myocardial infarction. This was based on the history of two distinct coronary insults, clinical findings of myocardial infarction, x ray findings of an aneurysmal bulge of the lower left ventricle and suggestive electrocardiographic tracings. Subsequent examinations confirmed the diagnoses.

Summary

1. The etiology, pathogenesis, clinical and laboratory picture of cardiac aneurysm are discussed.

2. A case illustrating the usual findings of cardiac aneurysm following coronary thrombosis with myocardial infarction is presented. This case was diagnosed during the life of the patient and was followed for over four years.

3. It is pointed out that despite the relative infrequency, the diagnosis can be made during life by careful correlation of history, x ray, electrocardiogram and

observations during the period of formation of the aneurysm.

4. It is illustrated that the prognosis regarding life expectancy and ability of the heart to carry on normal function is much more favorable in these cases than generally believed.

References

1. Berk, Louis H.: Cardiac aneurysm, *Am. Heart Jour.* 17:569 (May) 1939.
2. Braunstein, A. L.; Bass, J. B., and Thomas S.: Gummatous myocarditis and aneurysm of left ventricle, *Am. Heart Jour.* 19:623 (May) 1940.
3. Sigler, L. H. and Schneider, J. J.: Diagnoses of cardiac aneurysms, *Ann. Int. Med.* 8:1033 (March) 1935.
4. Babey, Andrew: Displacement of esophagus by cardiac lesions other than mitral stenosis, *Am. Heart Jour.* 13:228 (February) 1937.
5. Steel, David: Roentgen diagnosis of cardiac aneurysm, *J.A.M.A.* 6:432 (February 10) 1934.
6. Dressler, W. and Pfeiffer, R.: Cardiac aneurysm, report of ten cases, *Ann. Int. Med.* 14:100 (July) 1940.
7. Rowland, D.: Cardiac aneurysm, report of a case with correlation of clinical, radiological and electrocardiographic findings. *Ann. Int. Med.* 19:349 (August) 1943.

913 Ninth Avenue

ASYMPTOMATIC AMEBIASIS ENCOUNTERED IN NEW YORK CITY

ANTHONY BASSLER, M.D.
New York, N.Y.

It is assumed that from six to ten percent of the people in the United States harbor the pathogenic intestinal protozoan, Endamoeba histolytica, the causative agent of amebiasis in its various forms. Hummel (1), Craig (2), Barr (3), and Faust (4) believe that careful stool examinations would prove this to be even higher than ten percent. The reasons for the oversight are: 1, low incidence of significant symptoms; 2, difficulties of symptom interpretation; 3, inadequate diagnostic procedure, and 4, the belief that this is only a tropical disease.

It is a well known fact that the instances of amebiasis compared to the cases in which the symptoms are classic (dysentery, hepatitis, liver abscess, perforation of the bowel, ulceration of the large and small intestine, bone and brain abscesses, etc.), are by far the less numerous. Considering the large number of persons who harbor this virulent and destructive parasite, it really is remarkable that of all who harbor it such a small percentage never show definite symptoms of infestation. Being aware that the lytic toxin of this organism is capable of producing states of ill health, both local in the digestive tract and general in the body, I carried out stool examinations in one thousand five hundred instances of persons who did not present the classic symptoms of Endamoeba histolytica involvement and in whom other diagnoses to readily explain complaints were not evident. In addition to this group there were forty-two instances of amebiasis with definite symptoms, all being positive in both trophozoids and cysts, and are not included in the 113 instances in which cysts were found.

Since the diagnosis of amebic infestations are best made by stool examinations, the zinc sulphate—centrifugal—flotation technique was employed. The direct film method, complement fixation, culture and skin tests were not considered necessary for the observation. Only one stool specimen was examined and it is probable that if three to five had been made (as is necessary in a suspicious case) or that other diagnostic methods had also been employed routinely throughout, a higher percentage of positive results would have been obtained.

The object of the investigation was to note the percentage of carriers in persons who lived in New York City and presented themselves for medical handling what symptoms they complained of, and what the results of antiamebic medications had on them. In the 1500 stool examinations, there were 113 instances in which the Endamoeba histolyticacysts were found, approximately eight percent. Since these cases were non-dysenteries, direct film examinations to note the trophozoites were not routined. In the first thirty-two cases, warm specimens after magnesium sulphate purgation were examined and the motile organism was met with but twice and in one it was doubtful as to being histolytica, although the symptoms cleared on medication. Of the 113 patients, there were thirty-one who had lived or had visited the tropical and subtropical countries where they may have picked up the infestation. The remaining eighty-two patients had been living steadily within the corporate limits of New York City and had taken trips away of not more than a few hundred miles. Thus it may be said definitely that at least two-thirds of the 113 patients had been infected in New York City and environs, five and one-third percent.

The diagnoses that had been made in many of these cases were interesting. They ranged from such organic conditions as chronic appendicitis, peptic ulcer, chronic cholecystitis, typhlitis, liver disturbance, colitis, and on a functional basis, as toxemia, gastrointestinal irritation, colonic spasms, nervous headaches, vasomotor disturbance, endocrine disturbance, constipation and others less numerous. It is further interesting that stool examination had been made in forty-nine of the cases and ova without specific identification had been recorded in but four.

The accompanying table, which presents a classification of the symptoms and the relief resulting from amebiasis treatment in these symptomatic cases, is of interest.

Analyzing these results it is evident that a number of complaints commonly met with in the practice of medicine and due to other conditions can also be brought about by the presence of endomeba histolytica infection in the human intestinal canal. It must be recognized that other conditions, such as biotoxic intestinal states, functional and psychosomatic conditions, etc., may be fundamentally responsible for the complaint even though there be Endomeba histolytica in the intestinal canal. Changes from normal bacteriology were common in these cases. It should be obvious that to ar-

rive at the diagnosis of cause of complaints when the stool findings are Endamoeba histolytica positive, a treatment for the amebiasis is necessary to help clarify the diagnosis. We can agree with Craig and Faust (5) that the presence of such symptoms or complaints "should always suggest an examination of the feces for the possible presence of Endamoeba histolytica". It is manifest that when complaints, such as those mentioned, are present, they could be due to the lysins from this parasite and that cure by other means than amebiasis therapy could be completely in error, and any improvement accomplished by other means would be only partial and probably not be sustained. More than that, if only from a health menace viewpoint, the eradication of this parasite would be in order.

Table: Symptoms Present and Results from One Course of Treatment

Symptoms	*Number of Instances*	*Cured*	*Not Cured*
Fatigue	105	41	64
Nervousness	91	19	72
Lack of ambition	74	64	10
Colicky pains (along colon and pelvis 41, right iliac fossa 32)	73	58	15
Constipation	72	16	56
Colonic tenderness	66	51	15
Neuralgic pains (abdominal 21, general 44)	65	56	9
Aching legs	60	32	28
Diarrhea, short attacks	51	32	19
Postmeal gaseous eructations	51	21	30
Anorexia	41	16	25
Pyrosis, acid stomach	41	15	26
Vasomotor disturbance, peripheral	42	15	27
Irritable pulse, tachycardia	32	21	11
Poor memory	38	16	22
Insomnia	31	15	16
Backache	24	5	19

Among the complaints the most striking improvement was noted in the cases of colicky pains in the abdomen that suggested colonic spasm. Also prominent were those of short attacks of diarrhea or loose stools such as are noted in vague conditions of enteritis or colitis resulting from dietetic and other causes. Recurrent attacks of frontal headache were also quickly benefitted, these probably being due to toxic effects on the nerve nuclei in the cerebrum, which also explains the cases of neuralgic pain, both general and abdominal. Aching pains in the legs, a condition always obscure in origin and often due to fatigue neurosis, were also promptly relieved. The other symptoms and results were recorded.

No cases were scheduled as having been improved, this leaving too much confusion especially in nervousness, gaseous distention after meals, underweight, anorexia and indigestion, backache, insomnia, poor memory, irritable pulse and tachycardia, and vasomotor disturbances. Four weeks from the beginning of treatment was allowed and if the results were not positive the other methods of both examination and treatment for the complaints were employed. The main object was to note the number of cases in which there were positive stools and to note prompt results from amebacide treatment alone.

In a number of cases that eventually cleared up it is possible that the results may have taken place more because of the original handling of the amebiasis than because of other treatments, the beneficial results being slower to come about than in the cured group. In the group not benefitted, after the month's time, other reasons were ascribed for the complaints. In all of the cases the stools were not reexamined to note removal of the parasite or their continuation. From an amebiasis viewpoint, these present an interesting set of questions. Why is it that one person will complain of symptoms and others will not? Also, why do some complain of certain symptoms and in others the symptoms would group up differently? The figures mentioned in connection with the definite symptoms usually were a combination of four or five in the average cured cases. It is manifest that the symptoms mentioned are common and are seen in a vast array of conditions met with in clinical medicine which are not due to amebiasis. On the other hand, of the many more reasons for their production they are to some extent caused by the Endamoeba histolytica, and the connection should be thought of. Caution should be exercised that, in the presence of any one or group of these symptoms, with the stools positive for the Endamoeba histolytica, cure of the complaint should not be promised.

There is no doubt that in a few instances the human being may harbor these parasites, with no symptoms whatever resulting from them, and that the parasites being present the symptoms which have been mentioned are entirely due to other reasons.

Treatment

The treatment used consisted of a high protein diet and the use of diodoquin, anayodin and vioform administered, orally, giving a full course in each instance. The relief of clinical symptoms showed no choice of one of these drugs over the others. They are all efficient up to at least ninety-five percent in carriers. Emetine hydrochloride injections or rectal enemas of amebacide remedies were not employed.

Conclusions

Endamoeba histolytica was found in 113 instances in 1500 routine stool examinations (approximately eight percent) of persons who had lived in the city of New York and environs and did not present the classic symptoms of amebiasis.

The list of complaints, symptoms and results from amebiasis treatment are presented. In these the largest percentages of benefits were noted in colonic tenderness, colicky pains, short diarrhea attacks, lack of ambition, neuralgic pains, aching legs, poor memory, insomnia and irritable pulse.

Recognizing that far more cases of the complaints mentioned are due to other conditions than Endamoeba histolytic infections, nevertheless they may be due to an asymptomatic amebiasis in which quite dramatic response would come from specific treatment.

Bibliography

1. HUMMEL, H. G.: The proctologic significance of diarrhea, *Sou. Med. Jour.*, 36:595 (Aug.) 1943.
2. CRAIG, C. F. and FAUST, E. C.: *Clinical Parasitology*, 2nd Ed., Philadelphia, Lea & Febiger, 1940, p. 49.
3. BARR, D. P.: *Modern Medical Therapy in General Practice*, Baltimore, Williams & Wilkins Co., 1940, vol. 2, p. 1830.
4. FAUST, E. C.: *Amer. Jour. Trop. Med.*, 21:35-48, 1941.
5. CRAIG, C. F. and FAUST, E. C.: Op. cit., p. 54.

121 EAST SEVENTY-FIRST STREET

Editorials

Aspirin

Self-drugging with over-the-counter medicaments has become within itself a sort of national disease, and of all drugs asked for, aspirin is probably the most frequently requested. Headache is an exceedingly common ailment, and aspirin often relieves it; therefore, we have a ready answer to the question *why*. Some forty years ago, the profession became acquainted with acetylsalicylic acid and it was found to be useful either alone or in combination with acetphenetidine and other adjuvants. The public soon caught on, and began to prescribe it for self, friends and neighbors, and now, having sown the wind, we are reaping the whirlwind.

An anxious colleague wrote to a medical journal some time since, saying that his daughter in college was taking thirty to forty grains of aspirin a day to relieve headache, and this upon the advice of the physician to the college infirmary! No diagnosis had been made, or, at least, had not been established, and the father was outraged, not because of this fact so much but because no other drug such as strychnine sulphate, aromatic spirits of ammonia or sodium bicarbonate had been added. He was worried because "aspirin is a coal tar synthetic preparation and is a heart depressant, immediate or remote". He seemed to think that it should be made from oil of wintergreen. This is a mistaken notion for it has been proved by laboratory and clinical tests that synthetic salicylates are *not* more toxic than those made from gaultheria oil. The salicylates, in general, are not especially depressant to the heart, and they probably do not create damage to this organ. If one finds a damaged heart in those taking salicylates, the damage has usually been present for a long time—probably ever since an attack of rheumatic fever in childhood. Aches and pains of indeterminate origin often persist for years after such an attack has been forgotten, and it is for these forms of malaise that acetylsalicylic alone or in combination is taken. In any case this drug should not be prescribed with an alkali such as sodium bicarbonate, since alkalis decompose the acetylsalicylic acid, forming therefrom an alkali salicylate. This causes gastric irritation and distress for the relief of which a person may take more of the tablets thus forming a vicious circle.

One of the chief dangers of indiscriminate drug-taking, as every physician knows, is delayed diagnosis. Headaches, if daily or persistent or of a boring character, are symptomatic of some disease which may may be deep-seated. Among these we may set down brain abscess, brain tumor, chronic nephritis, high blood pressure, sinusitis, eyestrain or some toxic condition due to an unrecognized focal infection. Headaches which occur at night or are worse at night may be due to syphilis, possibly with thickened dura or gummatous formation somewhere. It is well when taking a history always to make sure that this question is asked and answered: Is your headache worse at night? The causes of headache are seemingly legion and only by thorough elimination of all suspected factors can the final cause be determined. This may require a week or more in a hospital where every x ray and other laboratory test may be carried out. Since any drug given for the relief of head pain "wears out", one must have at hand substitutes so that dependence on any one will not lead to "habit". Acetylsalicylic acid seems not to be habit-forming in the sense of the taker being unable to give it up at will. It and acetphenetidine are found in practically all of the widely advertised radio "pain killers". However, in such case drugs have to be costly in order to find the money to pay "the sponsor". It is the American way.

The Food and Drugs Act has done much to see that drugs are pure or at least as harmless as one can hope for, but we still have a long way to go in teaching the public not to encourage chronic illness through self-medication. That is part of our job as physicians. It is easy to shirk it and not bother to explain, especially when the patient is likely to think that the physician has his own interest only at stake. Then, too, the economic urge to avoid paying a fee is deep in the heart of many. It is merely human to be like that!

Penicillin Producer Receives Army-Navy "E" Award

About fifteen years ago Fleming accidentally discovered that a mold inhibited the growth of Staphylococcus aureus. He and some of his British coworkers endeavored to demonstrate that the product of this mold could be utilized in combatting infection in the human. It was a slow and tedious task.

Shortly after the outbreak of the war it was considered important that penicillin be produced in quantities sufficient to be helpful to the wounded and ill in the armed forces. A group of American chemical and pharmaceutical houses with the aid of the government went into an intensive program to produce this highly valuable preparation. They did so with misgivings for they had had but little experience in the complex procedures involved in fermentation, chemical recovery, and sterile handling of a hitherto little known product.

The beginnings were tedious, slow and fruitful of minor results. When it was found that the mold could be grown more advantageously in tanks than in bottles, this newer and more modern method was adopted. In the beginning the production was measured in

meagre millions. As momentum was gained the millions turned to billions; enough was made for the Army and Navy and gradually sufficient material was released for urgent civilian cases. Soon the material will be plentiful and enough will be made to make it available for all civilian requirements and new dosage forms will appear.

The producers are deserving of much praise. Government aid from the Army and Navy, the DPC, the WPB and other agencies made this entire successful venture possible. We have just been informed that the Heyden Chemical Corporation, one of the foremost producers of penicillin, has been awarded the Army-Navy "E" for their accomplishment in the penicillin program. They are the first to receive this coveted award which was given them for outstanding achievement. We congratulate them on their having received this emblem of achievement. The entire penicillin industry should also be congratulated on the part they have played in bringing production up to today's high level.

Anesthesia in Operations on Diabetics

The treatment of diabetics is much more thorough since the discovery of insulin, and if the condition is completely controlled, many patients would be suitable for surgery. Whether or not a diabetic is in a fit state for operation must be determined by the physician, and therefore continual cooperation between the physician and the surgeon is essential from first to last. It is said by some who should know that a properly prepared diabetic is a no greater surgical risk than the nondiabetic, and sometimes may even be better.

The choice of an anesthetic is important, for the reason that it must have the minimum effect upon the hydrogen ion concentration of the blood. Dr. John T. Hunter, in discussing the subject at a meeting of the section of surgery, medicine, and anesthetics of the Royal Society of Medicine, London, some time ago, said he believed that a patient who was sugar and acetone free, would, if certain adjustments were made in the carbohydrate intake and the insulin dosage, take the anesthetic at least as well as the ordinary patient. Small doses of morphine and atropine or morphine and scopolamine were not contraindicated. He thought that perhaps barbiturates administered intravenously were the most useful. Local or regional anesthesia was the method of choice, except in the presence of sepsis.

The use of chloroform must be avoided absolutely in diabetes, he said, as it caused tissue-cell destruction which impaired the glycogenic function more than any other agent. The safety and value of ether was doubtful. He considered gas and oxygen undoubtedly the best and safest inhalant anesthetic. There might be a slight rise in blood sugar, but acidosis was negligible. It was certainly the safest anesthetic in the midwifery of diabetics.

News Items

Alvarenga Prize.—Dr. Alexander S. Wiener, serologist of the Office of Chief Medical Examiner of New York City, has been awarded the Alvarenga Prize of the College of Physicians of Philadelphia, in recognition of his work on the various types of Rh factors and on their genetic transmission. Dr. Wiener will deliver the Alvarenga Lecture before the College of Physicians and the Philadelphia County Medical Society on October 3rd. His subject will be "Rh blood factors in clinical medicine".

Acoustic Problems Discussed.—Major Leslie E. Morrissett, M.C., chief of the otolaryngology branch, Surgical Consultants Division, presented a paper on the army's use of the whispered voice test, at the conference on acoustic problems held recently at New London, Conn., under the sponsorship of the Bureau of Medicine of the Navy. Attending were representatives of the United States and Canadian armed forces and civilian research and commercial organizations. It was recommended that a committee be formed to continue the study of problems concerned with sound.

Infantile Paralysis in Colombia.—An emergency hospital has been established in Pacora, Colombia, by the Colombian National Department of Hygiene for treatment of seven or eight children said to be suffering from infantile paralysis. Necessary equipment and supplies have been sent for the hospital, with competent doctors and nurses in attendance. Local authorities are cooperating in providing needed measures for treatment of the children.

Decreased Incidence of Venereal Disease.—Provisional figures for the fiscal year 1945, based on the first six months of the year, indicate decreases of about twenty-three percent in the number of cases of syphilis reported to State health departments and admitted to clinics, according to *The Military Surgeon*, July, 1945. The figures for gonorrhea indicate a decrease of about seven percent in cases reported to State health departments, but an increase of about nineteen percent in the number of cases admitted to clinics. Based on the first six months of the fiscal year, a total of 366,690 cases of syphilis is estimated for 1945, fewer than any number reported by the State health departments since 1937.

National Congress of Cancerology.—The Second National Congress of Cancerology was held in Havana, Cuba, May 7th to 12th. Attending the congress were many foreign members and delegates from the United States, Mexico, Guatemala, Panama, Ecuador, Chile, Puerto Rico, and other countries. A scientific exhibit was held, which showed the work being done in experimental cancerology, breast tumor, various forms of cancer, technique of treatment, and so on. An interesting feature of this congress was the daily sessions for the discussion of breast cancer and esophageal cancer. Seventy-three papers were listed on the program, and fourteen topics were discussed by ninety-three different authors.

Personal.—Sir Alexander Fleming, the discoverer of penicillin, is making a tour of the United States as a representative of the British Ministry of Supply.

Colonel Harold B. Gotaas, Sn.C., director of the division of health and sanitation of the Institute of Inter-American Affairs, has been decorated with the Order of Merit by the Chilian government.

Dr. Joseph S. Fruton, associate in chemistry at the Rockefeller Institute for Medical Research, has been appointed associate professor of physiological chemistry at Yale University.

Dr. Gerald H. J. Pearson, Philadelphia, was elected president of the Philadelphia Psychoanalytic Society at the recent annual meeting.

Dr. Helen Ingleby, since 1924 professor of pathology at the Woman's Medical College of Pennsylvania, resigned June 15th to head, on a full time basis, the division of pathology in the laboratories of the Jewish Hospital.

Dr. Harry C. Solomon, professor of psychiatry at Harvard Medical School, delivered the eleventh annual Jarecki Memorial Lecture at the Jewish Hospital, Philadelphia, on May 2d. His subject was "The effects of war on psychiatry".

Philip S. Platt, Ph.D., executive director of the New York Association for the Blind, was elected president of the Greater New York Council of Agencies for the Blind at its recent annual meeting.

Dr. E. Vernon Mastin, St. Louis, Mo., who was elected first vice-president of the Southern Medical Association at the last annual meeting, became president of the association upon the death of Dr. Edgar G. Ballenger, which occurred on June 1st.

Dr. Henrique da Rocha Lima, director of the Biologic Institute of the São Paulo State Department of Agricultural Sanitary Protection in Brazil, is visiting the United States to study our scientific and research institutions. Dr. Lima is internationally famous for his research in typhus and yellow fevers. He was formerly professor of tropical medicine in the University of Hamburg and in the Oswald Cruz Institute of Rio de Janeiro.

Dr. George E. Wakerlin, professor of physiology and head of the department, University of Illinois College of Medicine, and assistant dean, Rush-Presbyterian Division, has been elected chairman of the Chicago Cancer Committee, succeeding Dr. Ludvig Hektoen, who becomes honorary chairman.

Dr. George Baehr, clinical professor of medicine, College of Physicians and Surgeons, Columbia University, New York, delivered the De Lamar lecture in hygiene at the Johns Hopkins University School of Hygiene and Public Health on May 17th. His subject was "Medical service under the health insurance plan of Greater New York".

Dr. Olof Larsell, professor of anatomy at the University of Oregon, delivered the first J. B. Johnston Lecture on neurology on May 11th, at the School of Medicine of the University of Minnesota. His subject was "Comparative neurology and our present knowledge of the cerebellum".

Dr. Waller S. Leathers, professor of preventive medicine and public health and since 1928 dean of the School of Medicine of Vanderbilt University, retired on June 30th, and has been succeeded by Dr. Ernest W. Goodpasture, associate dean of the college.

Arts, Sciences and Professions in the Post-War World.—The Independent Citizens' Committee of the Arts, Sciences and Professions held a conference in New York, June 22nd and 23rd, to discuss employment problems and opportunities for expansion in the post-war world. On Saturday, June 23rd, an all day session was devoted to a national health and welfare program, with Dr. Channing Frothingham as chairman. Among the speakers were: Dr. Allan N. Butler, associate professor of pediatrics, Harvard University; Dr. John P. Peters, School of Medicine, Yale University; Dr. Ernst Boas, chairman, Physicians Forum; Nelson Cruikshank, director of social security, American Federation of Labor; Robert Lamb, national legislative director, Congress of Industrial Organizations; and Dr. Bion R. East, associate dean, Columbia University School of Dental and Oral Surgery.

Grants in Aid of Cancer Research.—Nine grants in aid to cancer research amounting to $79,377 were approved at the twenty-eighth meeting of the National Advisory Cancer Council, held at the National Cancer Institute, Bethesda, Md., according to *Science*. These grants are:

Harvard University, $24,500 for the study of relation of steroid hormones to growth and tumors. Dr. J. H. Means will be in charge of the work, and Drs. Fuller Albright and Joseph C. Aub will participate. Harvard will also receive $10,000 for the study of the pathology of cancer of the stomach, peptic ulcer, and gastritis, with Dr. Shields Warren in charge.

Mt. Sinai Hospital, New York, $10,775 for clinical studies of gastric cancer, to be conducted under the direction of Dr. Franklin Hollander.

University of Cincinnati, $10,000 for clinical studies of gastric cancer, to be conducted by Dr. Leon Schiff.

Northwestern University, $8,500 for research in cancer education, conducted under the supervision of Dr. A. C. Ivy.

Haskins Laboratories, New York, $5,000 for research on the virus-like agent in the mammary cancer of mice, conducted under the direction of Dr. Paul A. Zahl.

Detroit Institute of Cancer Research, $6,152 for a study of the relation of certain types of diets to induce cancer in rats. The research to be under the direction of Dr. W. F. Dunning.

New York University, $3,500 for a study of Hodgkins disease carried on by Dr. Robert W. Chambers.

University of Minnesota, $1,450 for studies in leukemia in mice, which will be directed by Dr. Arthur Kirschbaum.

Use of Packaged Medicines in Britain.—Volunteers undergoing the Medical Research Council hemoglobin survey in England recently were questioned by J. N. P. Davies, M.B., as to their consumption of packaged medicines. Of 277 persons (149 male, 128 female), packaged medicines were used by 207. Slightly more women (seventy-eight percent) took more medicine than men (seventy-two percent). Aspirin was used by 44.5 percent of the females and 21.5 percent of the males, the survey disclosing that most persons used it to ward off headaches rather than because of rheumatic symptoms. Laxatives were taken by 170 persons (102 males, 68 females), incidence of their use being highest among office and laboratory workers and lowest among those employed outdoors. Gastric sedatives were taken by eleven persons, cough mixtures by eleven, and headache powders by nine. Skin ointments were used by eight persons. The survey showed that, despite the propaganda of the past few years, only eighteen persons were taking any of the preventives, such as iron, and the vitamins and over half of these were laboratory workers or nurses.

Typhus Medal Awards.—The United States of America Typhus Commission Medal has been awarded to the following Medical Department officers:

Colonel Eugene W. Billick, M.C., of Monongahela, Pa., for rendering "exceptionally meritorious service to the Commission by giving unstinted support to typhus research and control in the Middle East and the Balkans".

Colonel William L. Wilson, M.C., of Washington, D.C., for performing "exceptionally meritorious service in connection with the work of the Commission from September, 1942, to May, 1945, by giving valuable assistance and advice on problems of policy, organization and operations".

Lieutenant Colonel Emory C. Cushing, of Arlington, Va., who "from 1942 demonstrated unusual ability in developing and applying modern methods of typhus control. Drawing on his wide knowledge and experience, he gave expert advice on programs dealing with typhus control both for military personnel and among displaced persons and refugees".

Lieutenant Colonel Edward S. Murray, M.C., of Cedar Rapids, Iowa, who "in Turkey in 1943-44, in Egypt in 1944 and in Yugoslavia in 1945 performed exceptionally meritorious service in connection with the work of the Commission". He had a prominent part in organizing and applying typhus control programs beneficial to those countries, and by scientific investigations he contributed to medical knowledge of typhus fever.

Major William A. Davis, M.D., of New York, who "both as a civilian and an officer performed exceptionally meritorious service in connection with the work of the Commission. In the winter of 1943-44, while a staff member of the Rockefeller Foundation Health Commission he gave valuable assistance in suppressing the typhus epidemic in Naples, Italy".

Major Robert S. Ecker, M.C., of Brooklyn, N.Y., for performing "exceptionally meritorious service in connection with the work of the Commission in several foreign countries. After successfully evaluating vaccination against typhus in Egypt in 1943, he helped control this disease among refugees in southern Italy during the 1943-44 epidemic in Naples". He carried out valuable typhus surveys in the Aden Protectorate, the Anglo-Egyptian Sudan, Ethiopia, and Yugoslavia. By his investigations he contributed new knowledge of typhus fever.

Major Christopher J. D. Zarafonetis, M.C., of Grand Rapids, Mich., whose investigations and research contributed to the development of improved methods of treating typhus and assisted in reducing the risk of infection of American troops.

Blue Cross Enrollment.—To facilitate the enrollment of persons employed by national firms with branch offices located in areas served by two or more Blue Cross Plans, a national Blue Cross enrollment office was opened on July 13th at 370 Lexington Avenue, New York. The office will function under the auspices of the American Hospital Association's hospital service plan commission which coordinate the programs of the Blue Cross hospital and medical prepayment plans now serving more than eighteen million persons in forty-three states, seven Canadian provinces and Puerto Rico, Dr. C. Rufus Rorem, director of the commission, said in making the announcement.

Frank Van Dyk, vice president of Associated Hospital Service, has been appointed director of the new enterprise. He will represent the various plans in the presentation of a uniform program to national firms but local plans will continue to conduct all local transactions including enrollment and the payment of hospital bills. As a further encouragement to national enrollment, the Plans have agreed unanimously to waive requirements as to the minimum size of local groups in enrolling branch office employees of national firms. They have also agreed to accept Blue Cross members who may be transferred from one Plan area to another when employed by firms enrolled on a national basis. Mr. Van Dyk predicted that the National enrollment service would stimulate Blue Cross membership.

Medical Health Center at Ohio State University.—The establishment of a medical health center at Ohio State University at an estimated cost of five million dollars will be asked of the 96th Ohio General Assembly, according to *Ohio State Medical Journal*. It is proposed that the legislature appropriate funds for the health center in addition to $12,500,000 being requested for other postwar building projects at the University. Plans for the proposed medical center include: a new building to house the College of Dentistry; an addition to Hamilton Hall, where the medical and dental colleges now are located, to provide adequate library facilities; an eight hundred bed addition to University Hospital, to furnish needed hospitalization facilities for Central Ohio and to bring clinical teaching opportunities up to minimum standards. At present the College of Medicine has two teaching hospital beds for each student, instead of six, as recommended by most medical educators.

Second Lasker Awards for Fertility Research and Maternal Care

For the second successive year, two $500.00 Lasker awards will be given through the Planned Parenthood Federation of America, Inc. for significant contribution to the improvement of maternal health care and for research in human fertility. The two Albert and Mary Lasker Foundation awards have been announced by Dr. J. H. J. Upham, chairman of the Federation's National Medical Advisory Council, who said: "We still know less about the science of reproduction than the science of mechanized warfare, and health care for pregnant mothers, in many parts of the country is still fifty years behind medical knowledge."

The awards will be as follows: 1. To the scientist making the most significant contribution in research in human fertility—either in the control of conception or in the correction of infertility. 2. To the public health service in a state or community for meritorious action in developing a complete program of maternal health care, including child spacing. The individual recipient of the award will be the executive officer most responsible for the development of the program.

The fertility award will be given in honor of the late Dr. Hannah M. Stone, first medical director of the Margaret Sanger Research Bureau and the public health award will be in honor of Mrs. Margaret Sanger, founder of the birth control movement and at present honorary chairman of the Federation.

The awards will be presented at the Annual Dinner of the Planned Parenthood Federation of America in New York in January 1946. Deadline for submission of entries for the awards will be December 1, 1945. Members of the Federation's Medical Committee headed by Dr. Richard N. Pierson of New York, will serve as judges.

Two similar awards were presented last January to Dr. John MacLeod of the Department of Anatomy, Cornell University Medical College and to Dr. Felix J. Underwood, executive office of the Mississippi State Board of Health.

Any person wishing to qualify for the awards, or to suggest the name of a scientist, physician or public health official who might do so, should address the Medical Committee, Planned Parenthood Federation of America, 501 Madison Avenue, New York 22, N.Y.

Book Reviews

Allergy

Essentials of Allergy. By Leo H. Criep, M.D., assistant professor of medicine and lecturer in immunology, School of Medicine, University of Pittsburgh. With a foreword by Robert A. Cooke, M.D. With forty-two illustrations, and one plate in full color. Philadelphia, London and Montreal: J. B. Lippincott Co., 1945. Pp. 381. Price $5.00.

Allergy is one of the most fascinating and intriguing fields of medicine. For the medical student and the general practitioner alike, it is essential to secure a proper foundation and perspective, for there is today and probably always will be an abundance of loose thinking, talking, and writing. The majority of the practitioners of today never had any formal education in allergy in their student days and the present teaching of this subject even in the best medical schools is scanty at best. This is not to say it should be given a predominating place in training for a medical degree, for it is after all only a part of internal medicine, but it is an important part.

The generally accepted diseases of allergy—asthma, urticaria, vasomotor rhinitis, and the angioedema group—are important not because they are communicable (for they are not, except perhaps in a genetic sense), and not because of any high mortality, but rather because they carry a relatively high morbidity rate. In other words, they are what the practitioner will meet in over ten percent of his practice, and it will be to his own and to his patients' satisfaction if and when he knows how to recognize and treat them.

Aside from this practical aspect, allergy derives perhaps its greatest significance and value from the fact that it is being more generally recognized as the satisfactory explanation of certain cellular reactions resulting in reversible and irreversible lesions of diseases not now accepted and classified as diseases of allergy. This is particularly true of certain lesions resulting from bacterial and viral infections, for allergy is not limited to reactions to protein and other inanimate organic material. It does not belittle our present knowledge of allergy to admit, as we should, that relatively little is known of the fundamentals of the allergic reactions or the nature of the protective response to present-day methods of immunological treatment which rests largely on empiricism.

But there are certain facts that are known even though much that passes for knowledge is still speculative. That confusion between fact and hypothesis still exists on many points in the minds of many is a natural condition at this stage of the development in the field of allergy. But it is important to hold this tendency in check, and in this book the author has done just this.

Based upon his long experience in research and clinical allergy, Dr. Criep has presented the existing knowledge of allergy with clarity and precision. He adequately outlines the special technics and emphasizes their limitations. In short, he has adhered strictly to the line between the facts that too largely permeate allergy thought, literature, and practice today. He has succeeded fully in doing what he set out to do—to write a sound textbook on allergy that should be a joy to the undergraduate students and the general practitioners for whom it is intended.

Injuries of Peripheral Nerves

Peripheral Nerve Injuries. Principles of Diagnosis. By Captain Webb Haymaker, M.C., A.U.S., neuropathologist, The Army Institute of Pathology, Washington, D.C., and Major Barnes Woodhall, M.C., A.U.S., chief, neurosurgical section, Walter Reed General Hospital, Washington, D.C. With 225 illustrations. Philadelphia and London: W. B. Saunders Co., 1945. Pp. 227. Price $4.50.

Colonel Nash, director of the Army Institute of Pathology, states in his foreword that this book began as a brochure for distribution to qualified Army personnel. The purpose was to illustrate, through a collection of diagrams, the anatomy and physiology of the peripheral nerves, and the proper methods of making an examination of them. Then it was found that case histories were also important in lending interest and understanding of the various problems which arose when nerves were wounded. Fortunately, a large quantity of records, photographs, and tissues had accumulated in the Institute. These are now set forth and described for use beyond the Army, and "outside physicians" are indeed fortunate to have access to this source material. Surgeon General Norman T. Kirk has also written a foreword. He states that the collecting of "material" for deposit in Washington was an order, and that excellent cooperation on the part of everyone concerned had contributed much to general knowledge.

Most of us must go far back to first-year days in medical school and refresh our memories as to such matters as the brachial and cervical plexuses and the innervation of the fingers. Then comes a method of examination which brings out the areas of motor and sensory deviations from the normal. Photographs of wounded men are shown, particularly photographs of an arm or leg or buttocks showing where a bullet or shell fragment shattered or injured the nerves which supply a given area, and the disability which resulted therefrom. This book has to do with diagnosis chiefly, that is, with an accurate determination of exactly which nerves are prevented from normal function. Reparative surgery is left to the neurosurgeon, but it seems obvious that he, too, must have a working knowledge of all that is here set down. It was found early in the war that the "wonders" of plastic surgery were not wonders at all unless they could also restore full function of the nerve supply to any given part. This book sets forth all of the basic knowledge required as a background for nerve repair.

Gynecology

Textbook of Gynecology. By Emil Novak, M.D., F.A.C.S., Associate in Gynecology, Johns Hopkins Medical School. Second Edition. Many new original illustrations, some of them in color. Baltimore: The Williams & Wilkins Company, 1944. Pp. 708. Price $8.00.

The first edition of this work was published in 1941. In this second edition two new chapters have been added. In one, the embryology of the female generative organs has been considered under one head; the other, on female urological conditions of special interest to the gynecologist, has been written by Houston S. Everett, M.D., chief of the Cystoscopy Clinic at Johns Hopkins Hospital. The purpose is to offer to student and general practitioner a well-rounded book suited to their special needs; therefore, detailed operative technique is not offered. However, one may assume that socalled "medical gynecology" would have more de-

tailed treatment than seems to have been allowed. For example, one hears much in these war days of gonorrhea in the female, and it certainly has become of increasing importance to the Army and Navy in the effort to keep our fighters in good health, but only some twelve pages are given over to acute pelvic inflammatory disease (chapter 23). Of these, the "gonorrheal type" occupies about four pages, including illustrations of salpingitis, and the treatment of all types is summed up in about two pages. Sulfanilamide therapy is sketched in two dozen lines, and, wonder of wonders, penicillin does not appear in the index, and was not found in the text. This will scarcely satisfy the reader who is looking for ready reference, especially so, since the author states that "infection by the gonococcus comprises about sixty percent of all cases of the three types of pelvic inflammatory disease". However, the chapters dealing with tumors of the uterus and adnexa are comprehensive and well illustrated. Sterility and endocrine disturbances are well handled, and the important subject of uterine bleeding is satisfactory. In the matter of format, paper, printing, type, illustrations, and general set-up, the publishers are to be complimented.

Pathology

A Textbook of Pathology. Pathologic Anatomy in Its Relation to the Causes, Pathogenesis, and Clinical Manifestations of Disease. By ROBERT ALLAN MOORE, Edward Mallinckrodt professor of pathology, Washington University School of Medicine, St. Louis. With 513 illustrations, thirty-four in colors. Philadelphia and London. W. B. Saunders Company, 1944. Pp. 1338. Price $10.00.

Each new textbook of pathology makes its own contribution to pathological anatomy in relation to the causes, pathogenesis and clinical manifestations of disease. The subject matter is presented in a manner consonant with the objectives of higher education. The author attempts to answer the dynamic questions of "how" and "why", as well as "what", specifically applied to pathology. The book is arranged into general and special pathology, the general section being subdivided into disturbances of metabolism, inflammation and tumors. The approach to the disturbances of metabolism rather than to anatomical types of degeneration is attempted to give more emphasis to the physiological aspects of pathology. The author feels that preventive medicine will play such an important part in the future that arrangement of bacterial disease is made according to portals through which bacteria enter the body rather than according to anatomical site of involvement.

The book is beautifully presented and clearly subdivided, each chapter followed by current useful references. Part I presents general pathology including a history of the subject; Part II, diseases caused by living agents; Part III, diseases caused by physical and chemical agents; Part IV, diseases related to pregnancy, fetus and newborn; Part V, diseases caused by deficiency; Part VI, diseases of obscure or unknown origin.

Despite the author's advanced notions of the mechanism of disease, he is still rather conservative in making dogmatic statements about established entities and even adheres to old concepts that have now been abandoned to classify hemorrhagic diseases, for example, in terms of bleeding and clotting time. To pivot the whole gamut of hermorrhagic diseases in terms of two little clinical tests is not commensurate with recent advances in the field. Nevertheless, newer facts are embodied clearly and graphically for quick comprehension. Illustrative material has been carefully selected to inform the reader rather than to ornament the text. This new book is a refreshing presentation of the subject as a whole, condensing tremendous sources of knowledge from all aspects of medicine into a well-defined pathology.

Materia Medica

Synopsis of Materia Medica, Toxicology, and Pharmacology. For Students and Practitioners of Medicine. By FORREST RAMON DAVISON, B.A., M.Sc., Ph.D., M.B., formerly assistant professor of pharmacology in the School of Medicine, University of Arkansas. Third edition. With forty illustrations, including four in color. St. Louis: The C. V. Mosby Co., 1944. Pp. 759. Price $6.50.

The first edition of this book appeared in 1940, the second in 1942. Both have been revised for use with the passing of time; certain drugs have become of less importance. For example, the sulfonamides are now in the limelight along with hormones, new disinfectants and microbiolic agents. The vitamins, which are not drugs, strictly speaking, have some ten pages devoted to them, including a structural formula for vitamin D. Here and there throughout the book there are clinical notes and hints as to the uses of various drugs which may prove of value to the clinician. There is some danger of "materia medica" descending into a state of "innocuous desuetude", chiefly because modern pharmaceutical houses make so many "elegant" preparations, but there will be, in all probability, prescriptions and drug stores to fill them as long as illness is the lot of man. Basic training in pharmacology is still important. This book helps to keep this knowledge alive and of practical value.

Worry and Disease

Stop Worrying and Get Well. By EDWARD PODOLSKY, M.D. New York: Bernard Ackerman, Inc., 1944. Pp. 124. Price $2.00.

This is a revised edition of the author's previous book published by the Rodale Press in 1940 entitled Worry and Disease. It is one of a dozen such books written for the laity by Dr. Podolsky. He tells here how to get rid of worry by adopting a "design for living", sound and constructive, and fitted to "human nature's daily needs." Some of the chapter headings are: The Great Power of the Mind Over the Body, What Worry Does To the Heart, Rheumatism Can Be Caused By Worry, You Can Worry Yourself Blind, How Worry Can Cause a Cold, Worry and the Thyroid, etc. This is good "pep stuff" and will help neurotic persons greatly; for they are prone to read widely, and dote on "symptoms" which they often write down so they will not overlook anything their medical adviser ought to know. One should, however, be mindful that there is also a type of patient who does not worry enough, who will suffer an ulcer on the nose under the delusion that it is merely "breaking out", or nurture a lump in the breast, regardless . . . These are, however, amply taken care of by such societies as that for the prevention of cancer . . . Dr. Podolsky has written an interesting and readable little brochure.

Periodontia

Textbook of Periodontia. Oral Medicine. By Samuel Charles Miller, D.D.S., F.A.C.D., associate professor of periodontia in charge of periodontia department, New York University. With an introduction by John Oppie McCall, A.B., D.D.S., F.A.A.P., F.A.C.D. and the cooperation of members of the periodontia staff and fifteen special contributors. Second edition. Philadelphia: The Blakiston Company, 1943. With 524 illustrations. Pp. 733. Price $9.50.

What used to be known as pyorrhea is now called by dentists periodontia or periodontoclasia, and they speak of the field of periodontology. We hear much of "the pink tooth brush", of "bleeding gums", and of "gingivitis". The radio is telling us how to "cure" these conditions, but the commentators might be amazed to see a book of this size devoted to the physiology, histopathology and endocrinology of gums and teeth. Every physician sees foul mouths, neglected gums, recession, and teeth so loose that they are ready to fall out. The influence of such conditions on general health has been stressed again and again, yet people still continue to "let their teeth alone". Dentists have said that they are baffled by the condition, many have regarded it as incurable. It is incurable in the late stages, but thoroughly curable if rigorous measures are undertaken when bleeding first appears. Systemic causes are potent here as elsewhere in the body. Vulnerability of local tissues to infections vary, of course, with the general health, but for the most part proper treatment of the gums, the scaling off of all "tartar", the application of antiseptics, the use of chemical or electrical cauterants, and the correction of malocclusion will at least delay the time for edentulation. Dr. McCall in his preface says that the present-day dental graduate is particularly fortunate in having at his command so much basic knowledge concerning the science and art of periodontia.

Every practicing physician needs to know what healthy gums and teeth look like. It is easy to overlook a single spongy bleeding area, that is, nevertheless, of first importance and requires immediate care. The patient must go at once to a dentist who knows how to cure this condition promptly. Later may be too late.

Hematology

Clinical Hematology. By Maxwell M. Wintrobe, M.D., Ph.D., associate in medicine, Johns Hopkins University, Baltimore, Md., etc. Philadelphia: Lea and Febiger, 1942. Pp. 792. Price $10.00.

As knowledge is gained and a subject is better understood, it should become more simple rather than more difficult. Yet hematology has appeared to the average physician to grow constantly more complex, in spite of the fact that great progress has been made in this field and a cleared concept of the factors governing hematopoiesis as well as of the disorders of blood formation has been evolved. The introduction of new methods, the description of new disease syndromes and the application of new terms have contributed to the apparent complexity of the subject. The literature, moreover, has grown voluminous and the task of the physician who must keep abreast of many fields is overwhelming. To bring together the accumulated information in the field of hematology in a systemic and orderly form, to sift the important from the less significant, to describe the newer methods which are of practical value and to make note of those which are less essential, to outline details of differential diagnosis, to describe the indications for and methods of treatment, and to make clear as far as present knowledge permits the nature of the underlying physiological disturbances, are the objects adequately fulfilled in this book.

Emphasis is placed on the importance of accurate diagnosis as a prerequisite of efficacious treatment. The use of therapeutic measures without discrimination and the administration of "shotgun" antianemic remedies indicate the need for a clear understanding of the indications for liver, iron, vitamins and other substances. The effective employment of these and other therapeutic agents is discussed in detail. Laboratory procedures of value in diagnosis are in the main quite simple and can be carried out in the office of the average physician. They are considered in detail. A departure from the usual custom has been made, however, in that the technical methods are not all grouped in a single section but are described in the various chapters of which they logically form a part. This is done because the objects and principles of a laboratory test must be thoroughly understood if it is to be well performed and correctly interpreted. Only those procedures which do not come within the scope of the various specific chapters are described in the chapter on methods. The vital importance of technical precision is stressed and the limits of accuracy of various procedures are indicated.

Human Nature

About Ourselves. A survey of human nature from the zoological viewpoint. By James G. Needham. With illustrations by William D. Sargent. Lancaster, Pa.: The Jaques Cattell Press, 1941. Pp. 276. Price $3.00.

This is a book about ourselves, individually and collectively. We are something more ethereal than "featherless bipeds" and something more substantial than 'such stuff as dreams are made on". Substance and action at least are observable and a vast deal of knowledge has become available in recent years to those who seek it. The author has endeavored to assemble and to present in simple untechnical form some of the basic zoological facts that must be taken into account in any penetrating study into the nature of human kind.

Bound as we are to all animal life by ties of tissue andn cell and organ, by bonds of breathing and of feeling; bound to the higher ranges of that life by blood and bone and brain, by nurture, first in a mother's womb and then in a mother's arms, it would be very stupid of us to ignore the meaning of our zoological heritage, and so miss the beginnings of the story that it tells of the coming into dominance of mind and the gathering together of the first materials for a social order.

The ultimate concern of biology is with that part of human life within which emotions mix with rationality, contributing when the mixture is good to our welfare and happiness; when bad, to our confusion and disillusionment.

This book is an exposition of human nature, without any plans for its improvement. The lack of such plans is due to the fear that Mother Nature would not be very regardful of them; that she will go right along making our successors after her regular patterns, and that they will continue to behave very much as we have done.

MEDICAL RECORD

A National Review of Medicine and Surgery, Established 1843

FORMERLY KNOWN AS THE MEDICAL JOURNAL AND RECORD

PUBLISHED MONTHLY BY
THE MEDICAL JOURNAL AND RECORD PUB. CO., INC.

Office of Publication: 210 Orchard Street, East Rutherford, N. J.
Editorial and Executive Offices: 215 Fourth Avenue, New York 3, N. Y.

GREGORY STRAGNELL, M.D. ---------- *Editor*
A. M. MARLATT ---------- *Assistant Editor*
N. F. HANF ---------- *Business Manager*
H. GORDON HUNTER --- *Advertising Representative*

Subscription Price: Under Domestic Postage, $4 Yearly; Under Foreign Postage, $4.75 Yearly; Single Copies, 40 cents.

Remittance should be made by New York Exchange, post office, or express money order, payable to The Medical Journal and Record Publishing Company, Inc., or by registered mail, as the publishers are not responsible for money sent by unregistered mail. Remittances from Foreign Countries should be made with International Money Orders.

MANUSCRIPTS

All material for publication should be sent to THE EDITOR of the MEDICAL RECORD, 215 Fourth Avenue, New York 3, N. Y.

Exclusive publication: Original articles are accepted with the understanding that they are contributed only to the MEDICAL RECORD.

Preparation: Material must be typewritten and double spaced. Carbon copies or single spaced manuscripts will not be considered.

Changes other than the correction of errors will not be permitted after the article has been set in type, so be sure and write your paper the way you want it printed.

Illustrations: Photographs should be numbered and bear on the back author's name and title of article; top of the picture should be indicated. Glossy prints produce the best half-tones. Drawings and charts for reproduction should be made in black ink.

Bibliographies should follow the style of the Quarterly Cumulative Index Medicus of the American Medical Association, and should give name of author, title of article, name of periodical, with volume, page, month, day of month if weekly, and year.

Manuscripts should carry addresses of authors and should not be rolled.

Reprints are furnished. Prices can be secured after article is in type.

All material published in the MEDICAL RECORD is copyrighted and should not be reproduced without our permission.

AUGUST 1945

Medicolegal Notes

Taking Usual Dose of Chloroform Not An Accident

In an action for double indemnity benefits under a life policy it was undisputed that the insured, a physician, took chloroform voluntarily, from a one pound bottle of chloroform, from which somewhat less than an ounce had been removed, and his body was found in bed, in a normal sleeping position. The insured had used chloroform for twenty to twenty-five years to alleviate pain by pouring a few drops on a handkerchief and putting the handkerchief over his face. Disregarding for the moment the physical disabilities discovered at the autopsy, the court said that if the insured took only the amount of chloroform to which he was accustomed and it caused his death, there was nothing unexpected or unusual in the means used. The means used were exactly what insured intended to use and did use and was prepared to use. The means were not accidental, but the result might be accidental.

Assuming, on the other hand, that insured's death was caused or contributed to by a heart and liver condition, recovery was precluded by the clause excluding death from disease in any form, regardless of whether insured also sustained an accident which was aggravated by the disease or which aggravated the disease. Glaeser vs. Prudential Ins. Co. of America, Federal District Court for Northern California, 57 F. Supp. 199.

Where Seriousness of Life Insurance Applicant's Condition is for Jury

Under Sec. 163, subd. 5 (h) of the New York Insurance Law, the New York Appellate Division holds, Niootra vs. John Hancock Mut. Life Inc. Co., 51 N.Y.S. 2d 953, that an insurance company is entitled to void a life policy although it insured the policy after it had knowledge that the insured had consulted a doctor for a condition that may not have been serious. It was for the jury to say, in an action on the policy after the insured's death, where there was evidence of a medical consultation by the insured, whether or not the insured had been treated or attended by a certain doctor and whether or not the plaintiff's beneficiary had sustained the burden of showing that insured's condition which occasioned such treatment or attention was not of a serious nature or not material to the risk. Judgment for plaintiff was reversed for a new trial. Lewis J. concurred as to reversal, but dissented as to grant of a new trial, voting for dismissal of the complaint on the ground that the evidence uncontrovertibly disclosed that the condition for which the plaintiff was treated was of a serious nature and that there was no evidence of waiver by the insurance company.

Compensable Injuries (New York)

The New York Appellate Division holds, Boost vs. 1918 Kings Highway Corporation, 51 N.Y.S. 353, that denial of an award of compensation for death as the result of a heart attack was not sustained by the medical evidence, the denial being based on the holding that the overexertion experienced by the superintendent of an apartment building in rushing back to the building on being informed that a flood was occurring in one of the upper apartments, coupled with the excitement and agitation produced, was not a competent producing cause of the superintendent's death.

In another case, Thaw vs. Browers Garage, Inc., 51 N.Y.S. 2d 429, the Appellate Division held that evidence that a compensation claimant suffered a heart injury while pushing one automobile out of the way of another car, which was being driven into the garage where the claimant worked, supported an award of compensation.

And in a third case, Mattison vs. Jones, 51 N.Y.S. 2d 430, a waitress and general maid was allowed compensation as being accidentally injured in the course of her employment when she fell on the waxed floor of a bedroom furnished to her by her employer on getting out of bed to answer a call to serve breakfast.

Interruption of "Continuous Disability"

Under the provision for accident indemnities, in a health and accident policy, for injuries which "wholly and continuously disable" the insured for one day or more, the continuity of a disability ceased when the insured went back to work for nine months, even though the insured worked only intermittently during that period. Hasson vs. Mutual Ben. Health & Accident Ass'n, Omaha, Michigan Supreme Court, 15 N.W. 2d 659.

PEPTIC ULCER MANAGEMENT

Knox Gelatine is successfully used in the frequent between-meal feedings that are often desirable in the management of peptic ulcer.

Given at hourly intervals, Knox Gelatine has provided a satisfactory control of the gastric secretions and gives relief from the painful symptoms.

A *Special Ulcer Diet* described in the Knox booklet, "Peptic Ulcer Dietary," has been prescribed by many physicians. It is a complete diet . . . bland and liberal in calories and protein. We will be happy to send you as many copies of it as you wish.

FOR THE FREE *Special Ulcer Diet, "Peptic Ulcer Dietary" leaflet and other special-diet booklets, clip and send this coupon.*

KNOX GELATINE U. S. P.

IS PLAIN, UNFLAVORED GELATINE...ALL PROTEIN, NO SUGAR

Knox Products Keep Pace Through Laboratory and Clinical Research

Help for Busy Nurses when patients require Special Diets! Free booklets showing adaptability of Knox Gelatine to dietary requirements. Write Knox Gelatine, Johnstown, N. Y., Dept. 456

	No. Copies Desired		No. Copies Desired
☐ Peptic Ulcer Dietary	_____	☐ Infant Feeding	_____
☐ Knox Gelatine Drink	_____	☐ Reducing Diets and Recipes	_____
☐ Feeding Sick Patients	_____	☐ Protein Value of Plain, Unflavored Gelatine	_____
☐ Diabetic Diet	_____		

Name.....

Address.....

City..... State.....

Birth Control in Egypt

In Egypt in the heart of the Moslem world and one of the most densely populated areas of the globe, Mohammedan religious courts have taken a realistic position on the practice of contraception, far in advance of the attitude of most religious bodies in the Western World, according to the Planned Parenthood Federation of America. A *fatwa,* or judgment, of the Grand Mufti of Egypt, highest judicial authority under Moslem religious law, has sanctioned the practice of contraception in marriage under a wide variety of circumstances ranging from ill health to economic hardship or, as the Grand Mufti so aptly put it, fear of "wicked times". The *fatwa* also permits abortion, prior to the "quickening of the embryo", in such cases where the life of the mother, prospective child, or a child already born may be threatened.

Since ninety percent of the Egyptian population is Moslem, the *fatwa* is effective for approximately fourteen million residents of that country, and may eventually prove of far-reaching significance in relation to the two hundred million other Mohammedan adherents in the world. In Egypt, as in other Moslem countries, all matters of personal status are cared for by the Church, and Church Courts have final authority.

The Federation described the *fatwa* as an important omen of the recognition in far eastern countries, marked by overpopulation, excessive fertility and depressed health standards of the need for birth control and family planning. In Chungking on May 18th, according to the Associated Press, the Sixth National Kuomintang Congress adopted resolution favoring a sweeping program for promotion of national solidarity which included "guidance in proper birth control".

It remains for Moslems in India to follow the example of their religious brothers in Egypt. When India, whose population increased fifty million in one decade, similarly awakens to the relation between its acute distress and its uncontrolled growth, there will be hope for the solution of what so many have called "the insoluble problem of India".

Injuries to the Nervous System

The incidence and severity of injuries to the central nervous system among battle casualties have been a challenge to the military surgeons of every war since the beginning of time, according to Winchell McKendree Craig (*Jour. Nerv. and Ment. Dis.,* May 1945), but not until World War I was great progress made in the treatment of cerebral injuries. The fundamentals learned then have proved valuable, and in the intervening years knowledge of the underlying physiological and pathological factors involved in intracranial injury has grown steadily. Head injuries have responded more satisfactorily to treatment since the effect of anoxia, resulting from trauma, is better understood. It has been demonstrated that the use of oxygen not only relieves anoxia but also helps to reduce intracranial pressure. It has also been learned that the administration of plasma and serum albumin in the course of the treatment for shock combats cerebral edema. Formerly meningitis and brain abscess threatened every case of brain injury. In this war infected head injuries have been the

kalak
REG. U. S. PAT. OFF.

Many surgeons find advantage in the use of what may be called:

KALAK ICE

prepared in a freezing unit of the ordinary refrigerator by filling the ice-cube compartment with KALAK rather than with water. The KALAK water freezes but does not freeze out the contained salts and an isotonic ice results that has various uses, such as in delicate mucous surfaces, as in stomatitis, post-tonsillectomy periods, and wounds where a cooling surface is desired by an agent that does not cause hyperemia and irritation like water-ice does owing to the hypotonicity of water as compared to the isotonicity of KALAK. *** Send for our Clinical Normals cards and register for others in the series now in preparation.

KALAK WATER CO.
OF NEW YORK, Inc.
30 Rockefeller Plaza
New York 20, N.Y.

"Pure Water Like Pure Air Is Vital To Health"

GREAT BEAR
IDEAL SPRING WATER

ELECTRIC WATER COOLERS AT
SMALL MONTHLY RENTALS

ALSO ENJOY WHOLESOME
GREAT BEAR BEVERAGES
Ginger Ale—Club Soda—Root Beer

GREAT BEAR SPRING COMPANY
New York—Brooklyn—Albany—Buffalo
Newark and the Oranges—Jersey City
Philadelphia

Consult Your Telephone Directory
For Office Nearest You.
Free Home or Office Delivery in Above Areas.

Immediate and persistent antacid action

Creamalin promptly reduces acidity within the stomach. The antacid effect is persistent. There is no local compensatory reaction, such as commonly occurs with alkalies, and hence no belated oversecretion of hydrochloric acid. Moreover, there is no risk of producing alkalosis.

Creamalin promptly relieves pain and heartburn associated with gastric hyperacidity.

Creamalin often induces healing of peptic ulcer when employed with an ulcer regimen.

agreeable to taste
convenient to carry and to take
efficient in action

C R E A M A L I N

Reg. U.S. Pat. Off.
Brand of ALUMINUM HYDROXIDE GEL
TABLETS

ARMY E NAVY

WINTHROP

WINTHROP CHEMICAL COMPANY, INC.
Pharmaceuticals of merit for the physician
NEW YORK 13, N. Y. WINDSOR, ONT.

exception rather than the rule. The use of sulfones and penicillin have so reduced the incidence of infection that the scope of surgical treatment has been immeasurably increased. In all previous wars, battle casualties involving the brain became infected if not surgically treated within a few hours, but at the present time, days may elapse before the hazard of infection becomes of serious import. The significance of this cannot be too greatly emphasized. The better understanding of shock, its prevention and treatment, has aided greatly in lowering the mortality and supporting the patient until a true evaluation of the extent of the injury can be made and adequate surgery can be done. Careful surgical excision of the wound is necessary.

In World War II, greater knowledge of proper nutrition and water balance and electrolytes has allowed for a shorter convalescence and, therefore, an earlier return to duty; skull defects are now being repaired with grafts of autogenous bone and rib cartilage or alloplastic materials such as vitallium, lucite or similar plastics, and tantalum; and the rehabilitation of patients with cerebral damage resulting in the impairment of special senses, speech, motor power and sensation involve considerable reassurance of the individual patient with an extensive program of reconditioning.

The author concludes that the improvement in surgical technique, the use of oxygen, sulfones, penicillin, plasma and whole blood and a better knowledge of the nature of cerebral trauma have resulted in a lowered mortality, as well as decrease in the disability from, injuries to the central nervous system.

Additional Grants for Sugar Research

Additional grants amounting to more than $50,000 for seven leading universities and laboratories have been announced by Dr. Robert C. Hockett, scientific director of the Sugar Research Foundation, bringing the total grants made by the Foundation to more than $300,000.

Recipients of these grants include McGill University Medical School, The University of Pittsburgh, Yale University Medical School, The University of Utah, New York University Medical School, Cornell University Medical School and Brooklyn Polytechnic Institute. The studies will seek new industrial uses of sugar and further explore the nutritional values of sugar. Eight of the projects call for allotments totaling $41,500, and involve research into entirely new fields. An additional $9,500 was recommended to continue experiments on projects already begun. These studies implement the original program of scientific research undertaken by the Foundation and are designed to develop a further understanding, not only of the product itself, but of its effect on the human system.

The seven new grants are as follows:

Dr. Hans Selye, associate professor of histology at McGill University Medical School, $10,000, for a three-year study of the effects of diets in protecting animals from the effects of overactivity of the endocrine glands.

Dr. I. M. Rabinowitch, associate professor of medicine at McGill University and director of the Department of Metabolism at the Montreal General Hospital, $10,000, for investigation of the use of sugars in

MARINOL
(IMPROVED FORMULA)
MARINOL (IMPROVED FORMULA) is an homogenized emulsion of cod liver oil and vegetable oils fortified with fish liver oils of high vitamin A potency to which has been added pure vitamin D3.
OUTSTANDING PROPERTIES
PALATABILITY: The desirable properties of the fish liver oils have been retained without the disagreeable taste and odor.
HOMOGENIZATION: This assures a uniform and stable product that permits of easy miscibility with milk, special formulae, fruit or vegetable juices, or with water.
HIGH VITAMIN POTENCY: 5,000 U.S.P. units of vitamin A and 500 U.S.P. units of Vitamin D3 supply the daily minimum requirements (FDA) in one teaspoonful.
LOW COST: A single teaspoonful daily is a prophylactic dose.
FOOD VALUE: Fish liver and vegetable oils supply another desirable property—that of caloric value.
EASY ADMINISTRATION is possible because of unusual potency of small dose.
CONSUMER PRICE: Bottle of 6 fl. oz. 85 cents. Bottle of 12 fl. oz. $1.50 (M.P.R. 392). HOW SUPPLIED: Bottles of 6 fl. oz. and 12 fl. oz.
FAIRCHILD BROTHERS AND FOSTER
70-76 Laight Street, New York 13, N.Y.

When Weight Gains

ARE NEEDED

To the underweight patient just recovered from severe acute or chronic illness, increase in weight may be difficult to achieve. Yet restoration of normal fat deposits and correction of nutritional deficiencies are essential for rapid return of strength and resistance to infection.

The intake of essential nutrients high in calorific value is expeditiously accomplished by including Ovaltine in the diet. This tasty food drink, made with milk as directed, is enjoyed by all patients both as a mealtime beverage and between meals. Not only rich in calories, it also provides generously other nutrients urgently required: biologically adequate proteins, highly emulsified fats, B complex and other vitamins, as well as the essential minerals iron, copper, calcium and phosphorus. The low curd tension of Ovaltine favors quicker gastric emptying, hence appetite is actually enhanced through this desirable behavior.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.

Ovaltine

Three daily servings of Ovaltine, each made of ½ oz. Ovaltine and 8 oz. of whole milk,* provide:

PROTEIN	31.2 Gm.	VITAMIN A	2953 I.U.
CARBOHYDRATE	62.43 Gm.	VITAMIN D	480 I.U.
FAT	29.34 Gm.	THIAMINE	1.296 mg.
CALCIUM	1.104 Gm.	RIBOFLAVIN	1.278 mg.
PHOSPHORUS	.903 Gm.	NIACIN	7.0 mg.
IRON	11.94 mg.	COPPER	.5 mg.

*Based on average reported values for milk.

In addition to our own clinical tests, over 15 years of successful use by the medical profession prove that in hypothyroidism, ITHYPHEN is a highly effectual reducing medication without undue toxic by-effects.

Samples and literature on request. Kindly enclose your professional card or letterhead.

Prescribe
ITHYPHEN
in **OBESITY**
ADVERTISED ONLY
TO THE PROFESSION

STRAUSS LABORATORIES
1328 Broadway, New York

USE THIS BLANK
FOR SUBSCRIBING
To MEDICAL RECORD

THE MEDICAL JOURNAL & RECORD PUB. CO., INC.
215 Fourth Avenue, New York 3, N. Y.

Please enter my subscription to the MEDICAL RECORD for one year, beginning.....

.....

☐ Enclosed find payment.
☐ Send me bill.

Name .....

Street .....

City ..... *State* .....

Subscription Price, $4.00 Foreign, $4.75

human nutrition in health and in disease. Dr. Rabinowitch is in charge of the Clinic for Diabetes, which is the largest clinic of its kind in Canada.

Dr. Gebhard Stegeman, professor of physical chemistry at the University of Pittsburgh, $7,000, to collate all existing data and carry out new measurements of the physical properties of sugar and sugar solutions for use by industrial chemists.

Drs. F. W. Zerban and Louis Sattler of the New York Sugar Trade Laboratory, $4,000, for further investigation of the unfermentable constitutents of molasses.

Dr. George R. Cowgill, professor of nutrition at Yale University Medical School, $3,600, to survey the vitamin content of various products of the sugar industry at the point when they reach the market. The survey will cover raw sugars, soft sugars, molasses, syrups, white sugars and high-test molasses.

Professor L. T. Samuels, head of the Biochemistry Department at the University of Utah, Salt Lake City, $3,500, to study the capacity of animals to adjust themselves physiologically to various types of diets.

Dr. H. M. Wuest, of Brooklyn Polytechnic Institute, $1,900, to study preparation of several compounds closely related to vitamin B_1 and study their effects on assay methods.

Drs. Walter D. Bonner and Ralph F. Phillips of the Chemistry Department at the University of Utah, $1,500, to study production of certain glucose derivatives directly from sugar and molasses.

In addition to the new grants, an additional $5,000 was awarded to Professor L. Emmett Holt, Jr., of New York University Medical School, to continue his work on the synthesis of vitamins in the intestinal tract under the influence of various diets.

A renewal of a $4,500 grant was given to Professor James M. Neill of the Department of Bacteriology and Immunology at Cornell University Medical School.

A New Albumin Test

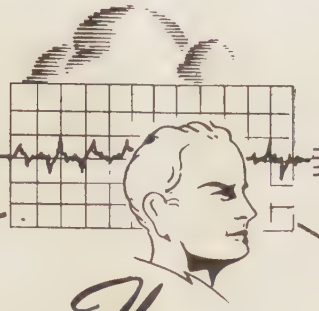
A new qualitative test for albumin is now available under the name, Albumintest. This new method provides a simple, reliable test for albumin that can be carried out easily and safely by physicians and public health workers. It is equally satisfactory for large laboratory operations.

The reagent which is nonpoisonous and noncorrosive is made as needed by adding one reagent tablet to four cc. of water. Bulk solutions for the laboratory can be prepared by using the same proportions.

The technics are based upon original clinical studies by recognized authorities in the fields of pathology and public health. These technics include both contact ring and turbidity methods—no heating is required. The one to be followed is a matter of choice.

The test was developed in the research laboratories of Ames Company, Inc., as a companion test to the Clinitest Tablet Method for detecting urine-sugar. The original laboratory work was begun in 1941 by J. A. Kamlet, Ph.D., W. A. Compton, M.D., and R. S. Nicholls. Clinical studies have been in progress since 1943.

Distribution of Albumintest tablets will be through regular drug and medical supply channels. Two bottle sizes will be available, thirty-sixes and one hundreds.



The BRAIN WAVES *in* PETIT MAL

Electroencephalography is now recognized as the most specific, definitive method for petit mal diagnosis. It is also the best laboratory method for checking an anticonvulsant's effectiveness in petit mal.

Neurosine has met both electroencephalographic tests and clinical scrutiny. Many convulsive disorders treated with Neurosine have exhibited fewer and milder attacks empirically.

Now, in a case series, electroencephalograms taken before and after Neurosine reveal an average reduction of 25% in the *amplitude* of brain wave patterns (index of severity). This is five times greater than the average variation of 5% in untreated cases.

Neurosine is a balanced, synergistic combination of four bromides with therapeutic adjuvants. This synergism facilitates the lowest amount of bromides that will reduce seizures to a tolerable minimum.

As an anticonvulsant, sedative and soporific, Neurosine is used in epilepsy, neuroses, insomnia, menopausal symptoms, hyperthyroidism, hypertension, alcoholism and spastic conditions. Contraindicated in nephritis, impaired renal elimination and salt-restricted diets.

DOSAGE: 1 to 2 teaspoonfuls with water, repeated as required. Strictly limited to prescription use. Available in bottles of 2, 4 and 8 fluid ounces.

NEUROSINE

FOR PETIT MAL

DIOS CHEMICAL COMPANY ST. LOUIS 8, MO.

Wider Range of Action
BY combining the established bactericidal actions of both mandelic acid and methenamine in one unique chemical compound, Mandelamine achieves a wider, more effective range of therapeutic action.
Because of synergic action, this wider range of antibacterial activity is obtained with a dosage which is considerably smaller than that of the individual urinary antiseptics combined in Mandelamine.
You will find that Mandelamine is effective in the treatment of pyelonephritis, cystitis, prostatitis, and infections accompanying renal calculi and neurogenic bladder. Its safety and facility of therapy make it especially suitable for administration to children, during pregnancy, and in stubborn or inoperable cases where therapy is necessarily prolonged.
MANDELAMINE
Reg. U. S. Pat. Off.
(Methenamine Mandelate)
Mandelamine is supplied in enteric coated tablets of 0.25 Gm. (3¾ grains) each, in packages of 120 tablets sanitaped, and in bottles of 500 and 1000.
MANDELAMINE

NEPERA CHEMICAL CO. INC.
21 Gray Oaks Avenue,
Yonkers 2, New York.

Please send me literature, and a physician's sample of Mandelamine.

Name..... M.D.

Street.....

City..... State.....

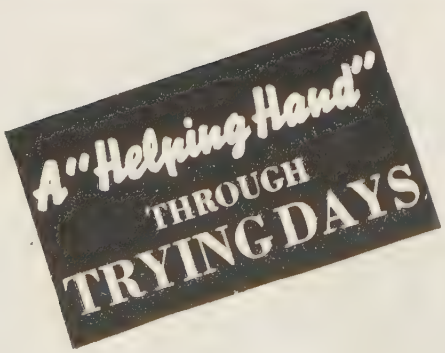
NEPERA CHEMICAL CO. INC.

Manufacturing Chemists YONKERS 2, New York

Plastic Eyes

A new plastic eye is being made by the Army which is lighter and more durable than glass and can be tinted to duplicate the appearance of the natural eye and fitted to provide as much motility as possible, thereby avoiding the appearing of staring, according to a release from the Office of the Surgeon General. This plastic eye is so durable that it can be dropped on the floor and stepped on without injury.

The first step in making the eye is to paint the "iris"—a thin celluloid disc, only one-ten-thousandths of an inch thick. The "iris" is then embedded in a tiny plastic lens of acralain, a plastic that has been used in dentistry for the last ten years. The impression of the patient's eye socket is made with a new type compound, an alignate plastic, that is chemosetting. This, mixed with water to make a paste, is injected with a syringe under the eye-lid at body temperature without causing pain or discomfort. It sets to a rubber-like consistency in five minutes and is removed painlessly, giving a permanent record of every tissue contour within the socket. A plaster cast is then made from this replica and used to mold a wax model of the eyeball. The iris button is fitted into the wax and the whole unit is then fitted to the patient. The body temperature melts the wax slightly to produce an even better fit. A second cast is then made from this wax replica, the wax is melted away and the cavity filled with acrylic resin, tinted the shade of the patient's natural eyeball. This is baked for an hour under a half ton of pressure. When it comes from the cast it has on its front surface the tiny disc of the iris. It is then polished and the "veins" are applied—tiny rayon



The dependable benefits of HYPEROL in helping to control certain periodic functional utero-ovarian irregularities are especially useful during these days of stress. HYPEROL aids in relieving pain, reducing congestion, and improving general well being where hematinic effects are reqired, enabling most women to continue in their normal activities.

HYPEROL *IN UTERO-OVARIAN IRREGULARITIES*

HYPEROL contains Hydrastine Alkaloid, Aloin, Apiol, and Ferrous Carbonate (Blaud).

The PURDUE FREDERICK CO.
135 Christopher St. New York 14, N.Y.

fibres, an innovation by Captain Don Cash, of Beaumont General Hospital, El Paso, Texas. As a final step, the whole eye is dipped into a clear plastic solution which produces a gleaming coating similar to the layer of liquid covering the natural eye.

Credit for developing the eye goes to three dental officers; Captain Stanley F. Erpf, Major Milton S. Wirtz and Major Victor H. Dietz who were working independently before they were brought together at Valley Forge General Hospital to found the artificial eye laboratory. Technicians are now being trained to make these eyes.

Prevalence of Disease in China

Raymond B. Fosdick (*Amer. Jour. Pub. Health,* Nov. 1944) says that disease is much more prevalent in China than it is here. Cholera is reported every year; there were one hundred thousand cases in 1932, sixty-five thousand in 1942, and seventeen thousand in 1943. There were approximately six thousand cases of bubonic plague in 1942. It is estimated that there are about six million cases of dysentery annually, ninety percent bacillary, ten percent amebic. The estimated number of cases per annum of typhoid fever is seven hundred thousand; of smallpox, five hundred thousand; of diphtheria, three hundred and sixty thousand; of scarlet fever, one hundred and eighty thousand. Epidemic meningitis is estimated at one hundred thousand cases per annum; malaria, twenty-one million cases per annum, and schistosomiasis, ten million cases per annum. Active tuberculosis is estimated at thirty-six million cases, eight percent of the population. Undernutrition is so wide-spread that no figures of any kind are available.

REED & CARNRICK

Parenteral Medicaments

● This is one of the most remarkable offers we have ever made to physicians. It applies to *every* Reed & Carnrick parenteral, every package size, *every* unitage. Place an order with your dealer, or direct, for 3 multidose vials, or 3 boxes of ampuls, of the same size and unitage, and you will receive another at no extra cost. For example, purchase 3 20-cc. vials Estrogenic Hormones, R & C, 10,000 I.U. per cc., and receive 1 20-cc. vial of the same unitage without extra cost (4 vials in all).

● Compare *the cost per injection* of Reed & Carnrick parenterals, when purchased this way, with the prices you are now paying. Place an order for R & C ampuls and vials NOW either with your dealer, or direct, and—ECONOMIZE WITH THE BEST!

● The quality, potency, and clinical efficacy of Estrogenic Hormones, R & C, and other R & C parenterals have so impressed themselves on physicians that the steadily increasing demand has resulted in significant manufacturing economies. The low list prices of these meritorious products, and the present remarkable "buy 4—pay for 3" offer, reflects these savings.

DESCRIPTIVE LITERATURE AND PRICE LIST ON REQUEST

ESTROGENIC HORMONES, R & C
THIAMINE HYDROCHLORIDE
CALCIUM GLUCONATE
LIVER AND IRON
LIVER INJECTION
AMPACOIDS PROSTATE
AMPACOIDS TESTICLE

★ REED & CARNRICK · JERSEY CITY 6, N. J. ★

DEFINITE TREATMENT
FIXED CHARGES
MINIMUM
HOSPITALIZATION
●
AUTHORITATIVE
INFORMATION
AND HOSPITAL
LITERATURE
ON REQUEST

THE CHAS. B. TOWNS HOSPITAL

43 SUCCESSFUL YEARS

TREATING DRUG AND ALCOHOL CASES

EXCLUSIVELY

●

293 Central Park West (at 89 St.), New York 24, N.Y.
SChuyler 4-0770

The prompt action and effectiveness of ESTIVIN enables the hay fever patient in most cases to pursue a normal mode of life during the dreaded "pollen months".

By exerting a soothing effect upon the irritated and congested membranes of the conjunctiva and nose, ESTIVIN produces welcome relief from the ocular and nasal symptoms.

One drop in each eye two or three times daily is generally sufficient to keep the average patient comfortable during the entire hay fever season. In more severe cases, additional applications whenever the symptoms recommence will keep such patients relieved throughout the day.

Literature and Samples on Request

Schieffelin & Co.
20 COOPER SQUARE, NEW YORK 3, N. Y.
Pharmaceutical and Research Laboratories

Schering Corporation Appoints New Sales and Promotion Heads

Schering Corporation, manufacturers of endocrine and pharmaceutical preparations, with offices in Bloomfield and plants in Bloomfield and Union, New Jersey, has appointed Dr. John N. McDonnell to the newly created post of director of domestic sales and promotion of that company, succeeding Mr. Arthur F. Peterson, manager of domestic sales division, who has resigned. Mr. Herman W. Leitzow, eastern division manager since 1944, has been made assistant to Dr. McDonnell. Mr. George C. Straayer, manager of the professional service division, will continue in that post and in addition will devote part of his time to the development of field operations for Schering.

The promotion of Mr. Leitzow and Mr. Straayer is in line with the present program of expansion of Schering's manufacturing and leadership in important pharmaceuticals for the medical profession. A native of Minnesota and a graduate of the state university there, Mr. Leitzow engaged in retail drug practice for a number of years before joining the Schering staff. Mr. Straayer came to his present position after several years of retail and industrial experience. He received his professional and business training in Michigan, and has been associated with Schering since 1939.

Dr. McDonnell, who has been for some years technical and marketing consultant to the pharmaceutical industry will coordinate the sales development and promotion activities of Schering. For the past four years head of research of the Drugs Branch of the War Production Board, he was recently national director of civilian penicillin distribution. Dr. McDonnell is editor of *American Professional Pharmacist* and a member of the faculty of pharmacy and business at the Philadelphia College of Pharmacy and Science. He pursued graduate studies there and at the University of Pennsylvania in technical and business subjects, and is a member or fellow of a number of professional societies and associations.

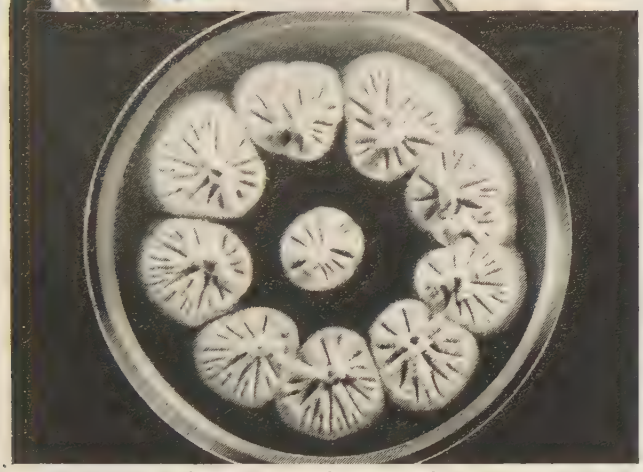
Three Billion Units of Penicillin Flown to Brazil

Three billion units of penicillin were shipped to São Paulo, Brazil, recently by a special Clipper of Pan American World Airways. The thirty thousand vials of the drug, weighing three thousand pounds, is the largest shipment of penicillin ever to leave the United States for a Latin American country. This historic shipment has been made possible through the research and production facilities of the Squibb Laboratories and the international air transport services of Pan American, a pioneer in air service between the Americas. Other large shipments are expected to follow. While limited quantities of penicillin have been sent regularly each month during the past year to Latin American countries, it is expected that the size of future shipments will increase substantially to meet the urgent needs of Latin America for this life-saving drug. Because penicillin requires special refrigeration and careful handling, it is essentially a "fast-freight" commodity, and the record shipment carried by the Pan American Clipper highlights the vital role international air transport plays in getting the precious drug straight to its destination in a matter of hours.

AT HOME, TOO

Penicillin Heyden is doing a fighting job!

Ever-increasing amounts of Penicillin Heyden are becoming available to fight disease on the home front. Day after day, larger and still larger shipments are leaving our Princeton plant to meet civilian needs.



Enlarged photograph of a culture dish showing separate colonies of Penicillin producing mold.

First floor view of some of the deep fermenters showing a control panel.

Awarded to the personnel of our Princeton, N. J., plant for excellence in the production of Penicillin. This plant is devoted entirely to the manufacture of this product.

Employees of all other Heyden plants have been similarly honored for excellence in production.

Sodium and Calcium Penicillin Heyden, in vials of 100,000 and 200,000 units, with eighteen months expiration date, for parenteral use, are available through distributors in the United States, selling under their own labels.

For research and compounding, Penicillin Heyden, in both vials and bulk, is sold directly to the user by Heyden.

FINE HEYDEN CHEMICALS

HEYDEN *Chemical Corporation*

393 SEVENTH AVENUE, NEW YORK 1, N. Y.

Chicago Sales Office: 180 N. Wacker Drive, Chicago 6, Ill.

Benzaldehyde • Benzoates • Benzoic Acid • Benzyl Chloride • Bromides • Chlorinated Aromatics • Medicinal Creosotes • Formates • Formaldehyde • Formic Acid
Glycerophosphates • Medicinal Guaiacols • Hexamethylenetetramine • Paraformaldehyde • Parahydroxybenzoates • Penicillin • Pentaerythritols • Salicylates

DR. BLACK SAW RED TODAY...*and smiled!*

. . . but when Mrs. Smith, para 2, called for her regular check-up three weeks ago, Dr. Black didn't see red and he didn't smile. Instead, when he compared a drop of Mrs. Smith's blood with his color index, he frowned. So, for the past three weeks, Mrs. Smith has been taking three tablets DPS Formula 100 after every meal. Today, when the check was repeated, Dr. Black found a nice hemoglobin response and one less secondary anemia to worry over.

Since faulty iron metabolism occurs not only in the gravid patient, but in many other clinicopathologic conditions as well, the potent and readily assimilable formula of this product* commends it to discriminating clinicians as the hematinic of choice for *all* types of secondary or nutritional anemia.

* Ferrous Sulphate 2¼ gr., Liver (Desi: 5) 3 gr., Thiamin HCl 83 mcg., Riboflavin 24 mcg., Ascorbic Acid 7.5 mg and 4 other substances

FORMULA 100

Dartell
LABORATORIES
LOS ANGELES 13 • CALIFORNIA

Literature available on request. Dartell Laboratories, 1226 South Flower St., Los Angeles 15, Calif.

Tuberculosis in Hospitals

Dr. Maxim Pollak (*Amer. Jour. Nursing,* Dec. 1944) says hospitals must recognize that a significant number of tuberculosis cases are admitted among their patients, first, because frequently the diagnosis is made only after a stay in the hospital, and more often because tuberculosis is not recognized and remains undiagnosed among their patients, unless special measures are instituted for its discovery. Reliable studies have shown that as many as two percent of the patients admitted to general hospitals may have unrecognized tuberculosis. Hence hospitals should insist, at least, that every patient with respiratory infection be considered potentially tuberculous until proved otherwise and the use of the proper contagion technic should be insisted upon in their nursing care.

Dr. Pollak believes that the attack on tuberculosis in hospitals should be conducted on a twofold plane (*Hospitals,* Sept. 1944). Unsuspected tuberculosis among the patients must be discovered for the sake of the patient and for the protection of the hospital personnel, while unsuspected tuberculosis among the employees must be ferretted out for the sake of the personnel and the protection of the patients. Only a few hospitals, he says, now conduct a systematic search for tuberculosis among their patients. Tuberculosis surveys in hospital personnel seem to be more frequent.

Colonel Esmond R. Long, Med. Corps, U.S. Army, says that the use of chest x rays in preinduction examinations, prevented about 150,000 tuberculous persons from entering the armed forces.

BURNHAM SOLUBLE IODINE

Has a wide field of application. Is useful wherever iodine medication is desirable. Each drop supplies 1 mgm. total iodine.

Further details upon request

Burnham Soluble Iodine Co., Auburndale 66, Boston, Mass.

USE
COLLENE
REG. U.S. PAT. OFF.

Wherever silver is indicated

You and your patients will equally appreciate the cleanliness and effectiveness of Collene, the original clean and stable silver solution—Always ready for use.

Write us for Samples and Literature

COLLENE LABORATORIES, Inc., 77 White Street, New York 13, N. Y.

The Medical Students at Belsen

At a press conference in London, Dr. A. P. Meiklejohn, member of the Rockefeller Foundation Health Commission, who has been seconded to the Nutrition Section of the European Regional Office of U.N.R.R.A., described the work of the ninety-six London medical students whom he had the privilege of supervising at the horror camp at Belsen (*British Medical Journal*, June 23, 1945). He said that the first batch of students arrived on the last day of April, and the primary task allotted to them was the distribution of food for the starving. Until then the small number of British troops garrisoning the camp, which had been liberated on April 16th, could do no more than deliver food from the cookhouses to the doors of the huts, where it was taken over by internees. The result of such a method was that, in the moral collapse which prevailed in the camp, those who were able to walk took all the food they could get and became desperately ill from overfeeding, while those who were too weak to leave their huts died because there was nobody to feed them.

Each student took responsibility for one or more huts, comprising from one hundred to one hundred and fifty patients, together with about twice that number of internees at least well enough to feed themselves. The students saw to it that the food was fairly distributed. The students also set up a dispensary and started medical treatment. The daily death rate among the sick, which had remained at about four percent until May 1, fell in one week to half that figure, and in the second week to half again, and at the same time a new spirit was plainly discernible among the internees. One special body of twenty-five students created within the camp a hospital area in which the most seriously sick could be cared for under hospital conditions, pending removal. They showed the same vigor in the business of cleaning out filthy, verminous bugs, "creosoting" the floors, and dusting with anti-louse powder, as others showed in their more strictly medical occupations. So excellent was their initiative that within two weeks, 1,200 patients had been washed, disinfected, reclothed, and returned to the renovated huts, where they were cared for by the students and volunteer nurses.

The last of the infamous huts was burned five weeks after the arrival of the first British troops in the area.

THIODRYL
for
ARTHRITIS THERAPY
INTRAMUSCULAR • INTRAVENOUS
Detoxifying and alterative agents combined with systemic therapy.
INCREASED MOTILITY—DIMINUTION OF PAIN
Literature upon request.
VERAX PRODUCTS, Inc.
116 Fourth Avenue New York 3, New York

Through The Menstrual Years of Life-

THE frequency with which the menstrual life of so many women is marred by functional aberrations that pass the borderline of physiologic limits, emphasizes the importance of an effective tonic and regulator in the practicing physician's armamentarium.

In Ergoapiol (Smith), the action of *all* the alkaloids of ergot (prepared by hydro-alcoholic extraction) is synergetically enhanced by the presence of apiol, oil of savin, and aloin. Its sustained tonic action on the uterus provides welcome relief by helping to induce local hyperemia, stimulate smooth, rhythmic uterine contractions, and serve as a potent hemostatic agent to control excessive bleeding.

May we send you a copy of the comprehensive booklet "The Symptomatic Treatment of Menstrual Irregularities."

MARTIN H. SMITH COMPANY
150 LAFAYETTE STREET, NEW YORK

INDICATIONS
Amenorrhea, dysmenorrhea, menorrhagia, metrorrhagia, in obstetrics.

ERGOAPIOL
..THE PREFERRED UTERINE TONIC..

DOSAGE
1-2 cap. 3-4 times daily.
SUPPLIED
In ethical pkgs. of 20 cap.

Thiouracil in Hyperthyroidism

Martin G. Vorhaus and Harold H. Rothendler (*New York State Jour. Med.*, May 15, 1945) present their findings in a survey of one year's experience in the use of thiouracil in the treatment of hyperthyroidism. Twenty-five cases were taken from clinics, as well as from private practice. In three of these patients the drug was discontinued because of undesirable reactions; neuritic, febrile, anemic, and leukopenic complications were noted. In the remaining twenty-two cases beneficial modifications of the clinical state, ranging from slight to marked, were observed. In five patients the response to thiouracil therapy alone was deemed clinically insufficient to justify long-term administration. Operation was advised for these five patients, four of whom had already successfully undergone thyroidectomy. In the remaining seventeen there was moderate to marked improvement in the hyperthyroid state. Five patients have remained asymptomatic for from two to four months after discontinuance of the drug. In one patient thiouracil was administered during the last six months of her pregnancy without any apparent ill effect on the offspring. Four patients with diabetes and hyperthyroidism showed favorable modification of their diabetes as their hyperthyroid state responded to thiouracil. Three patients with auricular fibrillation returned to normal sinus rhythm following thiouracil medication.

The authors emphasize the experimental nature of thiouracil administration and the need for the utmost caution in its use.

Oral Microorganisms

The lactobacillus may have been carrying more than its share of the blame for tooth decay, according to a paper on oral microorganisms presented by Robert G. Sanders and George F. Reddish of the Bacteriology Department of the Lambert Pharmacal Company, St. Louis, Mo., at the June meeting of the Scientific Section of The Proprietary Association of America.

In order to investigate their theory that variations in types of organisms is not great except in pathological conditions of the mouth, Sanders and Reddish conducted a series of tests on nineteen normal subjects by plating mouth rinses of sterile water. Their most striking observation was the constant type of colonies observed from all individuals. They found that the number of organisms varied greatly from one person to another and even in the same individual at different times of the day, but the kinds of colonies found were almost identical from one individual to another.

In connection with the accepted theory of the cause of dental caries, that the "lactobacilli in the mouth produce acid from carbohydrates in the mouth and that the acid erodes the enamel and exposes the dentine to the decaying action of bacteria", the authors conclude from their findings that "a number of strains of these carbohydrate fermenting micrococci are also able to produce large quantities of acid in a relatively short period of time. Certainly the numbers of these micrococci in the mouth far exceed the number of lactobacilli present and may prove to be just as important as the lactobacilli in the cause of dental caries."

in whooping cough

ELIXIR BROMAURATE

GIVES EXCELLENT RESULTS

Cuts short the period of illness and relieves the distressing spasmodic cough. Also valuable in other Persistent Coughs and in Bronchitis and Bronchial Asthma.

In four-ounce original bottles. A teaspoonful every 3 to 4 hours.

Recommended in Medical Literature.

GOLD PHARMACAL CO. NEW YORK CITY

DR. BARNES SANITARIUM

STAMFORD, CONNECTICUT

For treatment of Nervous and Mental Disorders, Alcoholism and Convalescents. Carefully supervised Occupational Therapy. Facilities for Shock Therapy. Accessible location in tranquil, beautiful hill country. Separate buildings.

Telephone 4-1143

F. H. Barnes, M.D., Med. Supt.

When the Worries of Reconversion Disturb Digestion and Appetite

Worries about jobs, due to reconversion, and the general disturbance of war tension, together with seasonal enervation, are impairing the digestion and appetite of many of your patients. GRAY'S COMPOUND, reliable "bitter tonic" and digestive aid should help to stimulate the appetite of such patients and assist in the digestion and assimilation of essential nutriments.

GRAY'S COMPOUND

. . . . . is a useful adjunct in treating the AGED • POSTOPERATIVE PATIENTS • CONVALESCENTS • the RUN-DOWN and the OVERWORKED. ACTIVE INGREDIENTS: Ext. of Gentian and Dandelion, Glycerine, Wine, Phosphoric Acid, Tr. Cardamom Comp. and aromatic elixir syrup.

THE PURDUE FREDERICK CO.

135 Christopher St. New York 14, N.Y.

FOR IODINE RESULTS WITHOUT THE USUAL IODINE DISTURBANCES

ORGANIDIN—WAMPOLE

A STABLE PREPARATION OF IODINE

IODINE

ORGANICALLY COMBINED

FOR INTERNAL ADMINISTRATION

Freely miscible with water. Contains no free iodine, no hydriodic acid, no inorganic iodides and no alcohol.

ORGANIDIN is absorbed readily from the gastro-intestinal tract, with less irritation and less toxicity than is produced by elementary iodine. Thus it permits a maximum effect with a minimum iodine dose.

A superior product which may be administered over an extended period of time with little probability of causing gastro-intestinal disturbances or iodism.

SUPPLIED IN 1-OZ. BOTTLES

MADE SOLELY BY

HENRY K. WAMPOLE & CO., INC.

MANUFACTURING PHARMACISTS

PHILADELPHIA 23, PA. U. S. A.

EFFECTIVE THERAPY
IN
Otitis Media
Requires Analgesia-Bacteriostasis, and
Dehydration of the Tissues.
Auralgan
The Doho Chemical Corp., New York-Montreal-London

It Is Easy To Forget . .

. . . our responsibility to the physicians whose years have been devoted ministering to the sick—*but we must not.*

These aged and retired colleagues are entitled to, and depend upon your support. A legacy in your will, a war bond, or a contribution, will help.

Make checks payable to:

PHYSICIANS' HOME
52 E. 66 Street, New York 21

Chas. Cordon Heyd, *President*
Max Einhorn, M.D., *1st Vice-Pres.*
W. Bayard Long, M.D., *2nd Vice-Pres.*
B. Wallace Hamilton, *Treasurer*
Alfred Hellman, M.D., *Asst. Treas.*
Beverly C. Smith, *Secretary*
B. A. Goodman, *Asst. Secretary*

Anniversary of Army Medical Department

The Army Medical Department celebrated its one hundred seventieth anniversary on July 27th, with the realization that it has grown into the largest organization of the kind ever known and that it is giving this nation's army the best medical care that soldiers have ever received.

From its inception in 1775 shortly after General George Washington became Commander-in-Chief of the Continental Army until the present day, the Army Medical Department has made steady progress in military medicine; it has made scientific discoveries that have benefited all of mankind; but never before has its progress in both of these categories been so rapid.

The Honorable Robert P. Patterson, Under Secretary of War, in a tribute to the work being done by the Medical Department, recently said that no army at any time in history has achieved a record of recovery from wounds and freedom from disease comparable to that of the American Army in this war. Mr. Patterson said also that the Medical Department is attaining new records in almost every field of its endeavor. He cited the Army's record of saving nearly ninety-seven of every one hundred wounded soldiers who reach Army Hospitals, the disease rate of less than one in one thousand, and similarly startling figures with reference to malaria, the dysenteries, and other diseases.

Seventy-third Station Hospital Honored

A Meritorious Service Unit Plaque was recently awarded to the 73rd Station Hospital in Rome for superior performance of duty, according to a news release from Allied Force Headquarters in Italy.

The hospital, which has been overseas twenty-seven months, is commanded by Colonel Frank F. Schade, Los Angeles, Calif. Its medical and dental officers are graduates of eighteen American and two European universities. It was activated at Fort Lewis, Wash., in July, 1942, it arrived in Oran, North Africa, in March, 1943, and came to Italy in January, 1944.

During the time of operation overseas, the 73rd Station Hospital has had a patient mortality rate of six tenths of one percent. In North Africa and Italy, this hospital treated more than twenty-two thousand injured, sick and wounded soldiers of ten nations. For many months the unit has been in the chain of evacuation for soldiers wounded on the Italian front and its surgeons have treated nearly two thousand serious cases. They also treated two thousand five hundred men injured in accidents occurring off the front.

"INTERPINES"
GOSHEN, N. Y.
Phone 117

ETHICAL—RELIABLE—SCIENTIFIC

Disorders of the Nervous System

BEAUTIFUL—QUIET—HOMELIKE—WRITE FOR BOOKLET

FREDERICK W. SEWARD, M.D., Director FREDERICK T. SEWARD, M.D., Resident Physician CLARENCE A. POTTER, M.D., Resident Physician

A Problem in Multiplication

X 26,000,000 = ?

Take the case of John Smith, average American:

For over three years now, he's been buying War Bonds through the Payroll Savings Plan. He's been putting away a good chunk of his earnings regularly—week in, week out. Forgetting about it.

He's accumulating money—maybe for the first time in his life. He's building up a reserve. He's taking advantage of higher wages to put himself in a solid financial position.

Now suppose *everybody* in the Payroll Plan—everybody who's earning more than he or she needs to live on—does what John Smith is doing. In other words, suppose you multiply John Smith by 26 million.

What do you get?

Why—you get a whole country that's just like John Smith! A solid, strong, healthy, prosperous America where everybody can work and earn and live in peace and comfort when this war is done.

For a country *can't help* being, as a whole, just what its people are individually!

If enough John Smiths are sound—their country's *got* to be!

The kind of future that America will have—that you and your family will have—is in your hands.

Right now, you have a grip on a *wonderful* future. Don't let loose of it for a second.

Hang onto your War Bonds!

BUY ALL THE BONDS YOU CAN...
KEEP ALL THE BONDS YOU BUY

MEDICAL RECORD

This is an official U. S. Treasury advertisement—prepared under auspices of Treasury Department and War Advertising Council

Psychiatric Clinics Needed

In the thirty-fifth annual report of the National Committee for Mental Hygiene the urgent need for communities to provide clinics for psychiatric treatment and rehabilitation of returned veterans is stressed. It is stated that most of the resources of the Committee, used for activities connected with the war for the last few years, are now being directed toward veteran rehabilitation. At the end of 1944 more than 1,500,000 men had been rejected for service, and 500,000 veterans had been discharged, for psychiatric reasons.

Through the assistance of the Commonwealth Fund, the Committee's Division on Rehabilitation, of which Dr. Thomas A. C. Rennie is director, made a survey of the psychiatric resources of the country. It was found that out of the total number of established hospitals and clinics in the entire country only 139 certified their preparedness to treat mental casualties. The number of Veterans Administration neuropsychiatric hospitals is at present limited to thirty. They offer hospitalization to all who need it but there is overcrowding. The most serious deficiency, however, occurs in connection with outpatient treatment. Because many of these hospitals are located near large cities the outpatient treatment which they have to offer is impossible for men who live in the country. Besides, the Veterans Administration cannot furnish or find anything like adequate outpatient clinic facilities for all those dischargees who do not need to be hospitalized but do require psychiatric treatment. This lack of outpatient care is serious. Both in the interest of the veteran and in the interest of the citizenry at large, psychiatric care should be available throughout the country; this would necessitate increasing the present number of psychiatrists by at least ten thousand together with the necessary auxiliary staffs.

Boeck's disease.—About the time that Oliver Wendell Holmes pointed out the contagious nature of puerperal fever, Carl Wilhelm Boeck had scabies named after him. Carl Wilhelm Boeck was born in Norway in 1808. His first published paper was on the Spedalsked Sygdom or Elephantiasis Graecorum. Boeck died in 1875.

PENTARBISMINE
(Bismuth and Pentavalent Arsenic in aqueous solution)
PAINLESS • EFFECTIVE
WELL TOLERATED

INTRAMUSCULAR SYPHILOTHERAPY

The direct action of an arsenical with the simultaneous prophylactic activity of bismuth.

VERAX PRODUCTS, INC.
116 FOURTH AVENUE, NEW YORK 3, N. Y.

Write for Literature

SISTER KENNY'S New Book on INFANTILE PARALYSIS

In collaboration with Dr. Jno. F. Pole (Univ. Minn.) Endorsed by the Nat. Foundation for Infantile Paralysis and many leading orthopedists. *Only authoritative work on the Kenny method. Illustrated.* 368 *pages.* $5.00.

BEST WORKS ON SEX TOPICS

THE SEXUAL QUESTION, by Dr. August Forel. (New edition.) A study of the sexual life by a psychiatrist. $4.00.

SEX SATISFACTION AND HAPPY MARRIAGE, by Rev. Alfred Tyrer. An excellent book for your patients contemplating marriage. $2.00.

SEX IN MARRIAGE, by Ernest R. and Gladys H. Groves. A safe guide in Marital relations for both sex. $2.00.

GENEALOGY OF SEX, by C. Thesing, M.D. The mating habits of the entire animal kingdom, and of man. A classic, profusely illustrated. $3.00.

PSYCHOLOGY OF SEX, by Havelock Ellis, the World's leading sexual scientist. $3.00.

SEXUAL PATHOLOGY, by Magnus Hirschfield, M.D. $3.00.

IMPORTANT NEW BOOKS

PRACTICAL MALARIAL CONTROL, a handbook for field workers. By Carl E. Gunther, M.D. $3.50.

MINOR SURGERY, a classical text book, comprising 18 chapters, by 18 editors of known ability. Especially valuable to those in service. $5.00.

THE EXAMINATION OF REFLEXES, by Robert Wartenberg, M.D. (New) Tells how to evaluate all the diagnostic reflexes, including many new ones, and how to avoid errors, illustrated. $2.50.

ART OF ANESTHESIA (New) by Paluel I. Flagg, M.D. Valuable for Student and Expert. Features all the new drugs and technique. $6.00.

We supply any book or magazine.

TIMELY NEW BOOKS

SULFONAMIDE THERAPY IN MEDICAL PRACTICE (New), *by F. D. Smith, M.D.* Exact dosage and toxic reactions of all the Sulfos and Penicillin. Illustrated. $5.00.

PICTORIAL HAND BOOK OF FRACTURE TREATMENT (New), *by Edw. L. Compere.* Most practical work on fractures in a decade; the latest methods illustrated and described; technic of skeletal traction and fixation. $4.25.

UROLOGY IN GENERAL PRACTICE, by *Ockerblad* and *Carlson* (Univ. Kas.). A mentor for practitioners who now must be able to handle the ordinary run of G-U cases; $4.00.

BED MANNERS, (New) Bed-iquette for the married. An intimate and confidential resume of bed-going and bed-doings; humorous and instructive. Illustrated. $2.00.

ENDOSCOPIC PROSTATIC SURGERY, *by Roger W. Barnes.* First illustrated technic of Transurethral method. $6.00.

NERVOUSNESS, INDIGESTION AND PAIN, *by Walter C. Alvarez.* A practical book for every day. $5.00.

THE URINARY TRACT, *by Kerr* and *Gillies.* A new Diagnostic X-Ray Atlas, with 120 full-page plates, a classic in expert film reading. 168 diseases are diagnosed. $5.50.

BIRTH CONTROL. Explains Ogino-Knaus technic. No mechanical or antiseptic interference. $2.00 postpaid, including timing chart.

ACUTE MEDICAL DISORDERS—Diagnosis and Treatment. (New) *Francis D. Murphy.* Illustrated. $6.00. Send for complete list of subjects.

MULLEN'S HAND BOOK OF TREATMENT arranged in alphabetical order for quick answers, 2000 formulae. $4.50.

WAR MEDICINE

A new book, covering all phases of *War Surgery, Aviation, Psychiatry,* and *Medicine,* by 50 experts. No work like it. Price $7.50.

Grover's High Frequency Practice

The author's experience of thirty years practice. The fundamentals and physics of electricity thoroughly explained. New chapters on Short Wave and Hyperpyrexia. Price, $3.50, including Grover's unique book on Blood Pressure, with diagnostic chart.

"I Was Hitler's Doctor!"

A startling insight to Der Fuehrer's intimate life with details of the prolonged psychoanalytic treatments given this degenerate character by Dr. Kurt Krueger. $2.00.

PHYSICAL THERAPY

By J. E. G. Waddington, M.D., based upon 25 years experience as practitioner, author and teacher.

Last word on the application of the Short and Ultra-Short Wave Therapy, Diathermy, Electro-Diagnosis, Electro-Surgery, Galvanic and Sinusoidal Currents, and Many Other Modalities. Price, $5.50.

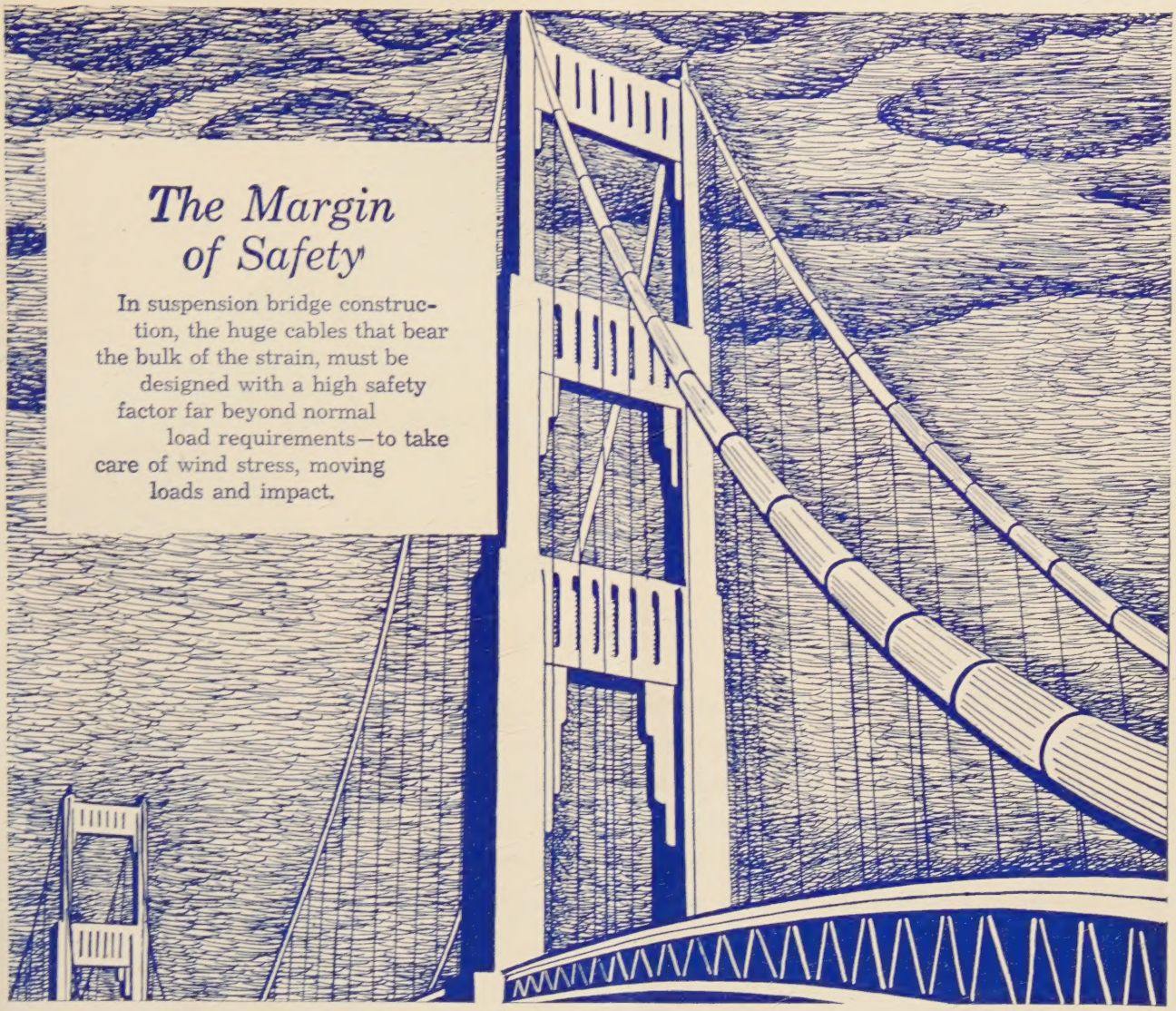
"Archives of Physical Therapy" **$5.00** *the year, (Monthly)*

Publishes all papers read at the Congress of Physical Therapy.

Send check with order and books will be prepaid. Or will ship C.O.D. plus return charges.

THE ELECTRON PRESS 200 B. M. Ass'n Building, Kansas City 8, Mo.

Orders from Pacific Coast filled by Fassett Medical Book Agency, 2300 Ralston Ave., Burlingame, California.


The Margin
of Safety
In suspension bridge construction, the huge cables that bear the bulk of the strain, must be designed with a high safety factor far beyond normal load requirements—to take care of wind stress, moving loads and impact.

THE SUPER POTENCY OF VI-TEENS, multi-vitamin tablets assures a generous margin of safety beyond the minimum adult needs—to take care of possible unusual deficiencies of any of the seven vitamins which Vi-teens supply. Two Super Potency Vi-teens tablets daily provide the following:

Vitamin B_1 (Thiamine HCL) (2666 U.S.P. Units)	8 Milligrams
Vitamin B_2 (G) (Riboflavin)	4 Milligrams
Niacinamide (Nicotinamide)	30 Milligrams
Pyridoxine (B_6)	2 Milligrams
Vitamin C (1500 U.S.P. Units)	75 Milligrams
Vitamin A	5000 U.S.P. Units
Vitamin D	1000 U.S.P. Units

Vi-teens Super Potency vitamin tablets are especially recommended in cases of avitaminosis where an unusually high dosage of additional multiple vitamin intake, particularly with reference to thiamin, riboflavin, and pyridoxine, is indicated. Regular size package on request.

LANTEEN MEDICAL LABORATORIES, Inc. . . . CHICAGO 10

COPYRIGHT 1945, LANTEEN MEDICAL LABORATORIES, INC.

PRIVINE
IN
ALLERGIC RHINITIS

Whether the *seasonal* type of allergic rhinitis is due to a sensitivity to pollens of the common trees, grasses or ragweeds, or whether the *perennial* type is caused by animal danders, vegetable powders, house dusts, foods or drugs ...PRIVINE* (Naphazoline) is extremely effective for shrinking the pale, swollen and "water-logged" nasal mucosa without compensatory swelling.

This aqueous, isotonic solution, buffered at pH 6.2 re-adjusts the alkaline secretion to normal acid range, and produces prompt and prolonged symptomatic relief for 2 to 6 hours without reapplication.

PRIVINE
HYDROCHLORIDE

*Trade Mark Reg. U. S. Pat Off.

a Ciba Product

CIBA PHARMACEUTICAL PRODUCTS, INC., SUMMIT, NEW JERSEY
IN CANADA, CIBA COMPANY LIMITED, MONTREAL